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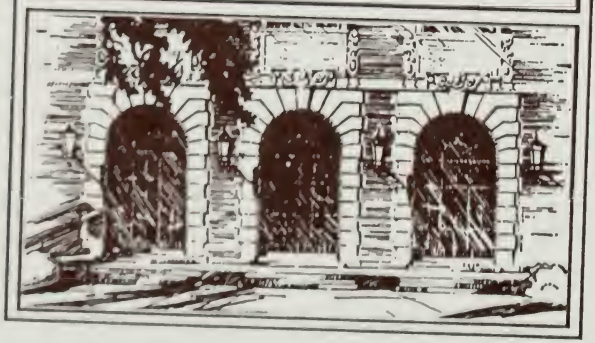

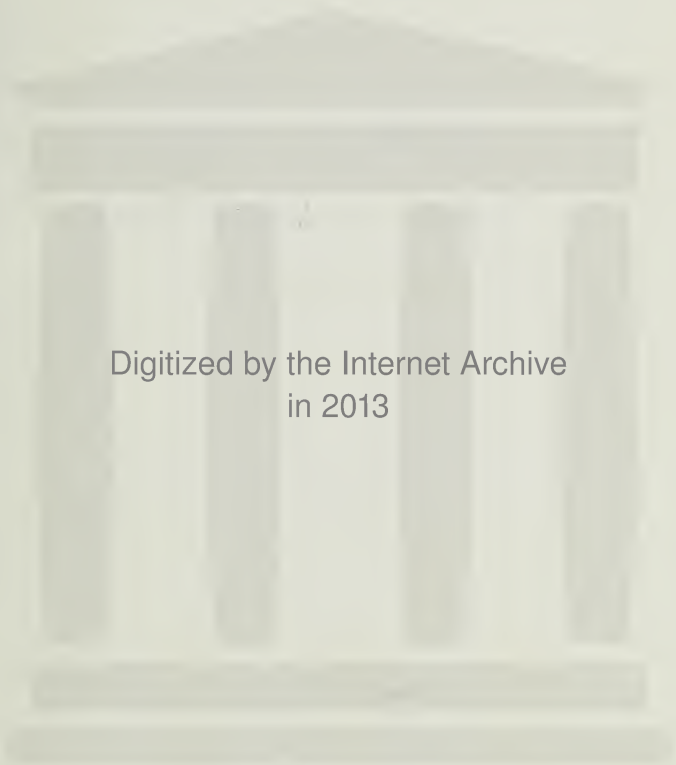

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TIME TABLE

First Semester, 1953

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-Registration Advisement Schedule.....
Calendar, First Semester, 1953-54.....
First Semester Registration Schedule.....
Legend for Section Letters.....
Chicago Undergraduate Division Calendar, 1953-54.....
Urbana Calendar.....
Accountancy..... 8,
Anthropology..... 5
Architecture..... 9,1
Art..... 10,1
Biological Sciences..... 11-1
Business Law..... 1
Chemistry..... 14-1
Civil Engineering..... 18,1
Economics..... 19,2
Education..... 20,2
Electrical Engineering..... 2
English..... 21-2
French..... 23,2
General Engineering..... 24,2
Geography..... 25,2
Geology..... 26,2
German..... 27,2
History..... 28,2
Humanities..... 2
Hygiene..... 30,3
Management..... 3
Marketing..... 3
Mathematics..... 31-3
Mechanical Engineering..... 3
Metallurgical Engineering..... 3
Military Science and Tactics..... 36-3
Music..... 3
Philosophy..... 3
Physical Education for Men..... 39-4
Physical Education for Women..... 42-4
Physics..... 44,4
Political Science..... 45,4
Psychology..... 46,4
Rhetoric..... 47-5
Social Sciences..... 50,5
Sociology..... 51,5
Spanish..... 52,5
Speech..... 53-5
Student Counseling Bureau..... 55,5
Theoretical and Applied Mechanics..... 56,5

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1953/54-
1960/61

PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester 1953-54

FORMER STUDENTS ONLY

Liberal Arts and Sciences

A - E	Monday	September 14	1 - 4 p.m.	Frame 14
F - K	Tuesday	September 15	9 -12 noon	Frame 14
L - Q	Tuesday	September 15	1 - 4 p.m.	Frame 14
R - Z	Wednesday	September 16	9 -12 noon	Frame 14

Commerce

A - E	Monday	September 14	1 - 4 p.m.	Room 27
F - K	Tuesday	September 15	9 -12 noon	Room 27
L - Q	Tuesday	September 15	1 - 4 p.m.	Room 27
R - Z	Wednesday	September 16	9 -12 noon	Room 27

Engineering and Architecture

No regular pre-advisement period. Pre-advisement was accomplished during the second semester 1952-53.

Physical Education

No pre-advisement period is scheduled for Physical Education majors.

First Semester, Fall 1953

Wed., Sept. 9 - Wed., Sept. 16	Orientation Period
Thurs., Sept. 17 - Sat., Sept. 19	Registration (Students registering for less than 12 hours report at 10:30 a Sat., Sept. 19, for registratio
Mon., Sept. 21	Instruction Begins
Mon., Sept. 23, 4:00 p.m.	Latest date for changes of study-list without fee
Thurs., Oct. 1, 4:00 p.m.	Latest date for rebates in full
Wed., Nov. 25, 6 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 30, 8 a.m.	Thanksgiving Vacation Ends
Fri., Nov. 13, 4:00 p.m.	Latest date for rebates in full
Thurs., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Tues., Dec. 22, 6 p.m.	Christmas Vacation Begins
Mon., Jan. 4, 8 a.m.	Christmas Vacation Ends
Fri., Jan. 15 - Sat., Jan. 23	Semester Examinations
Mon., Jan. 25, 10:00 a.m.	General Educational Development Tests, College Level, Room 300 (For all veterans who entered the Fall Semester, 1953-54 as beginning freshmen)

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

FALL SEMESTER REGISTRATION SCHEDULE

ur study-list will be given to you in the Navy Pier Gymnasium according the schedule below:

FORMER STUDENTS

rmer students paying their tuition and fees after 2 p.m., Saturday, ptember, 19, 1953, will be assessed a late registration fee of $5.00

- Bus	Thursday, September 17	9 a.m.
t - EZ	Thursday, September 17	1 p.m.
- Han	Thursday, September 17	11 a.m.
o - Kok	Thursday, September 17	3 p.m.
l - Mbz	Friday, September 18	10 a.m.
a - Rz	Thursday, September 17	2 p.m.
- Tao	Thursday, September 17	10 a.m.
p - Z	Friday, September 18	9 a.m.

NEW STUDENTS

- Dea	Friday, September 18	2 p.m.
b - Har	Saturday, September 19	9 a.m.
s - Lee	Friday, September 18	1 p.m.
f - Par	Friday, September 18	3 p.m.
s - Sck	Saturday, September 19	10 a.m.
l - Z	Friday, September 18	11 a.m.

udents registering for less than 12 semester hours will register :30 a.m. Saturday, September 19.

LEGEND FOR SECTION LETTERS*

Hour	5, 4, and 3 hour Courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

ote: This does NOT apply to lectures and laboratory sections in Art, rchitecture, and Engineering Sciences.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1953-54

First Semester (Fall, 1953)

Wed., Sept. 9 - Wed., Sept. 16	Orientation period
Thurs., Sept. 17 - Sat., Sept. 19	Registration
Mon., Sept. 21	Instruction begins
Wed., Nov. 25, 6 p.m.	Thanksgiving vacation begins
Mon., Nov. 30, 8 a.m.	Thanksgiving vacation ends
Thurs., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Tues., Dec. 22, 6 p.m.	Christmas vacation begins
Mon., Jan. 4, 8 a.m.	Christmas vacation ends
Fri., Jan. 15 - Sat., Jan. 23	Semester Examinations

Second Semester (Spring, 1954)

Mon., Feb., 1 - Wed., Feb. 3	Orientation period
Thurs., Feb. 4 - Sat., Feb. 6	Registration
Mon., Feb. 8	Instruction begins
Tues., March 2	University Day (University opened, 1868)
Thurs., April 15, 6 p.m.	Easter vacation begins
Thurs., April 22, 8 a.m.	Easter vacation ends
Frie., May 7	Honors Day
Sun., May 30	Memorial Day
Mon., May 31	Holiday
Tues., June 1 - Wed., June 9	Semester Examinations

Summer Session - 1954

Fri., June 18 - Sat., June 19	Registration
Mon., June 21	Instruction begins
Sun., July 4	Independence Day
Mon., July 5	Holiday
Fri., Aug. 13 - Sat., Aug. 14	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1953-54

First Semester (Fall, 1953)

Tues., Sept. 8 - Fri., Sept. 11	Entrance Examinations
Mon., Sept. 14 - Sat., Sept. 19	Freshman week and registration
Mon., Sept. 21	Instruction begins
Wed., Nov. 25, 1 p.m.	Thanksgiving vacation begins
Mon., Nov. 30, 1 p.m.	Thanksgiving vacation ends
Thurs., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Sat., Dec. 19, 12 noon	Christmas vacation begins
Mon., Jan. 4, 1 p.m.	Christmas vacation ends
Fri., Jan 22 - Sat., Jan. 30	Semester Examinations
Feb. 14, Sun.	Commencement Exercises

Second Semester (Spring, 1954)

Tues., Feb. 2 - Fri., Feb. 5	Entrance Examinations
Mon., Feb. 8 - Wed., Feb. 10	Registration
Thurs., Feb. 11	Instruction begins
Tues., Mar. 2	University Day (University opened, 1868)
Thurs., April 15, 1 p.m.	Easter vacation begins
Wed., April 21, 1 p.m.	Easter vacation ends
Fri., April 30	Honors Day (Classes dismissed at noon)
Mon., May 31	Memorial Day (Holiday)
Thurs., June 3 - Fri., June 11	Semester Examinations
Sun., June 20	Commencement Exercises

Summer Session - 1954

Tues., June 8 - Fri., June 11	Entrance Examinations
Fri., June 18 - Sat., June 19	Registration
Mon., June 21	Instruction begins
Mon., July 5	Independence Day (Holiday)
Fri., Aug. 13 - Sat., Aug. 14	Summer Session Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Students who present one unit of bookkeeping for entrance should register in Accy. 102. They will not be allowed full credit in Accy. 101 unless high school bookkeeping credit can be dropped. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or abov

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	18	Eggebrecht
	C1	10	MWF	22	Schneider
	D1	11	MWF	23	Eggebrecht
[1]Students with 95	E1	12	MWF	24	Kabbes
or more credit hours	F1	1	MWF	17	Ross
receive only 2 hours	F2	1	MWF	24	Fox
credit.	G1	2	MWF	24	Fox
	H1	3	MWF	16	Harris
	J1	4	MWF	25	Fox
	M1	9	MTT	16	Harris
	N1	10	MTT	17	Margraff
	P1	11	MTT	17	Harris
	Q1	12	MTT	17	Ross
	S1	2	MTT	20	Schneider
	T1	3	MTT	22	Kabbes
	U1	4	MTT	22	Kabbes

Accy. 102. PRINCIPLES OF ACCOUNTING:- Similar to Accy. 101. Studen who have one unit entrance credit in bookkeeping should take thi course rather than Accy. 101. Students who have failed Accy. 10 may register in Accy. 102 and will receive credit as in Accy. 10 if their final grade is "C" or above.

2 hours[1]	Q1	12	TT	25	Margraff
	S1	2	TT	17	Eggebrecht
	T1	3	TT	20	Schneider

[1] Students with 95 or more credit hours will receive only 1 hour credit.

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101 or 102. Prerequisite: Accy. 101 or 102.

3 hours[1]	B1	9	MWF	17	Margraff
	D1	11	MWF	22	Yankow
	F1	1	MWF	23	Margraff
[1]Students with 95	S1	2	MTT	16	Harris
or more credit hours	T1	3	MTT	17	Eggebrecht
receive only 2 hours					
credit.					

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing, credit or registration in Econ. 102 or Econ. 108.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	19	Ross
	E1	12	MWF	22	Yankow
	G1	2	MWF	22	Yankow
	J1	4	MWF	23	Yankow
	M1	9	MTT	21	Ross

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: Credit or registration in Accy. 106.

3 hours	B1	9	MWF	22	Schneider
	D1	11	MWF	24	Kabbes

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	2	W	251
	Lab. A	2-5	MF	241
	Lab. B	2-5	TT	241

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	F	1	MF	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G.E. 108.

3 hours	Lec.	9	W	251
	Lab. A	9-12	TT	241
		10-12	W	241
	Lab. B	2-5	TT	241
		2-4	W	241
	Lab. C	9-12	MF	241
		10-12	W	241

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

Arch. 132. ARCHITECTURAL DESIGN:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	1	W	251	
	Lab. A	2-5	TT	242	
		2-4	W	242	
	Lab. B	9-12	MF	242	
		10-12	W	242	

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	2-5	MWF	242

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materia and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV including single family residences and simple business structures with basements, crawl spaces or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	G	2	MF	251

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistant construction; manufacture and performance characteristics of materials; support systems; typical details; finishing material Prerequisite: Arch. 141.

2 hours	F	11	TT	251

ART

Art 111. INTRODUCTION TO ANCIENT AND MEDIEVAL ART:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	E	12	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	C	10	MWF	251
	H	3	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture.

2 hours	A	9-12	TT	91
	B	2-5	TT	91
	C	9-12	MF	91
	D	2-5	MF	91

Art 182. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 181.

Art 182. FREEHAND DRAWING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours	A	2-5	TT	84	
	B	2-5	MF	84	

Art 183. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 182.

2 hours	A	9-12	MF	83	
	B	3-6	MF	83	
	C	9-12	TT	83	

Art 184. FREEHAND DRAWING:* Primarily for students in architecture and landscape architecture. Prerequisite: Art 183.

2 hours	A	8-11	MF	84	
	B	8-11	TT	84	

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz.

4 hours[1]	Lec. C1	10	WF	218	Hopkins
	Lec. F1	1	WF	218	Pickett
[1]Students with 95 or more credit hours receive only 3 hours credit	Lec. M1	9	TT	218	Presley
	Lab. 1	8-10	WF	46	Spirakis
	Quiz 1	9	M	46	Spirakis
	Lab. 2	8-10	TT	46	Spirakis
	Quiz 2	8	M	46	Spirakis
	Lab. 3	10-12	TT	46	Spirakis
	Quiz 3	11	M	46	Spirakis
	Lab. 4	10-12	WF	46	Faughnan
	Quiz	10	M	46	Faughnan
	Lab. 5	12-2	WF	46	Little
	Quiz 5	1	M	46	Little
	Lab. 6	2-4	TT	46	Little
	Quiz 6	2	M	46	Little
	Lab. 7	2-4	WF	46	Faughnan
	Quiz 7	3	M	46	Faughnan
	Lab. 8	4-6	TT	46	Little
	Quiz 8	4	M	46	Little
	Lab. 9	4-6	WF	46	Little
	Quiz 9	5	M	46	Little
	Lab. 10	8-10	TT	48	Rouffa
	Quiz 10	9	M	48	Rouffa
	Lab. 11	8-10	WF	48	Presley
	Quiz 11	8	M	48	Presley
	Lab. 12	10-12	WF	48	Presley

LIBRARY

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz 12	10	M	48	Presley
	Lab. 13	12-2	WF	48	Madison
	Quiz 13	1	M	48	Madison
	Lab. 14	2-4	WF	48	Graham
	Quiz 14	3	M	48	Graham
	Lab. 15	4-6	TT	48	Faughnan
	Quiz 15	4	M	48	Faughnan
	Lab. 16	4-6	WF	48	
	Quiz 16	5	M	48	
	Lab. 17	8-10	WF	44	Faughnan
	Quiz 17	8	M	44	Faughnan
	Lab. 18	10-12	TT	44	Graham
	Quiz 18	11	M	44	Graham
	Lab. 19	12-2	WF	44	Glassman
	Quiz 19	1	M	44	Glassman
	Lab. 20	4-6	TT	44	Glassman
	Quiz 20	4	M	44	Glassman
	Lab. 21	8-10	WF	45	Glassman
	Quiz 21	9	M	45	Glassman
	Lab. 22	11-1	TT	45	McMillan
	Quiz 22	11	M	45	McMillan
	Lab. 23	10-12	WF	45	Rouffa
	Quiz 23	10	M	45	Rouffa
	Lab. 24	2-4	TT	45	Pickett
	Quiz 24	12	M	46	Pickett
	Lab. 25	4-6	TT	45	
	Quiz 25	4	M	43	
	Lab. 26	8-10	WF	43	McMillan
	Quiz 26	8	M	43	McMillan

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. E	12	WF	210	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
	Quiz 1	11	M	48	Rouffa
	Lab. 2	2-4	TT	48	Glassman
	Quiz 2	2	M	48	Glassman

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses, the microscopic multicellular plants and animals as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms

Biology 121. MICROBIOLOGY:- with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. Prerequisite: Biology 101. (Concluded)

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. S	2	TT	210	Madison
	Lab. 1	8-10	TT	43	Madison
	Quiz 1	9	M	43	Madison
[1]Students with 95	Lab. 2	11-1	TT	43	Madison
or more credit hours	Quiz 2	11	M	43	Madison
receive only 3 hours	Lab. 3	10-12	WF	43	McMillan
credit.	Quiz 3	10	M	43	McMillan

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals, and classifications. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. F1	1	WF	210	Hopkins
	Lab. 1	8-10	TT	44	McMillan
	Quiz 1	9	M	44	McMillan
[1]Students with 95	Lab. 2	10-12	WF	44	Graham
or more credit hours	Quiz 2	10	M	44	Graham
receive only 3 hours	Lab. 3	2-4	WF	44	Shank
credit.	Quiz 3	2	M	44	Shank
	Lab. 4	2-4	TT	44	Shank
	Quiz 4	3	M	44	Shank
	Lab. 5	4-6	WF	44	Graham
	Quiz 5	5	M	44	Graham

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their functions and evolution. Lectures, and laboratory. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. B	9	MWF	210	Shank
	Lab. 1	8-11	TT	45	Grubgeld
	Lab. 2	12-2	MWF	45	Grubgeld
	Lab. 3	4-6	MWF	45	Grubgeld

Biology 141. VERTEBRATE PHYSIOLOGY:- This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organisms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. N1	10	TT	210	Hopkins
	Lab. 1	2-4	TT	43	Sangster
	Quiz 1	1	M	43	Sangster
[1]Students with 95	Lab. 2	2-4	WF	43	Presley
or more credit hours	Quiz 2	3	M	43	Presley
receive only 3 hours credit.					

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite Biology 101 and 132; junior standing.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. D	11	MWF	210	Sangster
	Lab. 1	2-4	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	Cl	10	MWF	25	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Math. 111 or 112. Students may register in any lecture section but are required to take the quiz and laboratory in some one section.

5 hours[1]	Lec. C	10	MW	204	Schrage
	Lec. M	9	TT	204	Schrage
[1]Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 hours credit receive only 3 hours credit.	Lab. 1	8-10	MWF	50	Lipsky
	Quiz 1	8	TT	74	Lipsky
	Lab. 2	10-12	TTF	50	
	Quiz 2	11	MW	74	
	Lab. 3	12-2	MWF	50	Wells
	Quiz 3	12	TT	74	Wells
	Lab. 4	1-3	MWF	50	Cowin
	Quiz 4	2	TT	74	Cowin
	Lab. 5	2-4	MWF	50	
	Quiz 5	3	TT	74	
	Lab. 6	3-5	MWF	50	R. Miller
	Quiz 6	4	TT	74	R. Miller
	Lab. 7	8-10	MTT	50	Ullman
	Quiz 7	8	WF	75	Ullman

Chem. 102. GENERAL CHEMISTRY:- For all students who have had one year of high school chemistry. Prerequisite: One unit of high school chemistry or equivalent training. Students may register for any lecture section, but are required to take the quiz and laboratory in some one section. Note: Students whose preparation in chemistry is inadequate are advised to register for Chem. 101.

Chem. 102. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	Lec. C	10	MW	204	Schrage
	Lec. M	9	TT	204	Schrage
	Lab. 11	8-10	F	50	Harris
[1]Students below the rank of senior receive 5 hours credit provided their high school chemistry has not been used for entrance and their final grade in Chem. 102 is "C" or above. Students with 95 or more credit hours receive only 2 hours credit.	Quiz 11	8	MW	74	Harris
	Lab. 12	10-12	Tu	50	Cowin
	Quiz 12	11	MW	75	Cowin
	Lab. 13	12-2	F	50	Questiaux
	Quiz 13	12	MW	74	Questiaux
	Lab. 14	2-4	Tu	50	Ullman
	Quiz 14	1	MW	74	Ullman
	Lab. 15	2-4	Th	50	Hedberg
	Quiz 15	3	MW	74	Hedberg
	Lab. 16	10-12	Th	50	Wells
	Quiz 16	10	TuF	75	Wells
	Lab. 17	1-3	F	50	
	Quiz 17	2	MW	74	
	Lab. 18	11-1	M	50	
	Quiz 18	12	WF	76	

Chem. 103. GENERAL CHEMISTRY:- For engineering students. Prerequisite: One unit of high school physics or 2½ units of high school mathematics or credit in Math. 111 or 112. Students may register for any lecture section, but are required to take the quiz and laboratory in some one section. Note: Students who have had no chemistary in high school or whose placement results are low will be placed in sections 21-30 incl. Those whose placement results are high will go into sections numbered above 30.

4 hours[1]	Lec. D	11	WF	204	Hunt
	Lec. H	3	MW	204	Hunt
[1] Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.	Lec. P	11	TT	204	Hunt
	Lab. 21	8-10	TT	50	Cowin
	Quiz 21	9	WF	75	Cowin
	Lab. 22	10-12	TT	50	Koucky
	Quiz 22	10	MW	74	Koucky
	Lab. 23	2-4	TT	50	Mansfield
	Quiz 23	2	MW	75	Mansfield
	Lab. 24	4-6	TT	50	Sackheim
	Quiz 24	3	TT	75	Sackheim
	Lab. 25	8-10	MW	50	
	Quiz 25	9	TT	74	
	Lab. 26	10-12	MW	50	Ullman
	Quiz 26	10	TT	76	Ullman
	Lab. 27	12-2	MW	50	Hunt
	Quiz 27	12	TT	75	Hunt
	Lab. 28	2-4	MW	50	Potempa
	Quiz 28	4	MW	75	Potempa
	Lab. 29	9-11	TT	50	Koranda
	Quiz 29	8	TT	75	Koranda
	Lab. 30	1-3	MW	50	Hedberg

Chem. 103. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz 30	11	TT	74	Hedberg
	Lab. 31	8-10	TT	53	
	Quiz 31	9	WF	76	
	Lab. 32	10-12	TT	53	Lipsky
	Quiz 32	10	MW	75	Lipsky
	Lab. 33	2-4	TT	53	Questiaux
	Quiz 33	2	MW	76	Questiaux
	Lab. 34	4-6	TT	53	Potempa
	Quiz 34	3	TT	76	Potempa
	Lab. 35	8-10	MW	53	
	Quiz 35	9	TT	75	
	Lab. 36	10-12	MW	53	
	Quiz 36	10	TT	80	
	Lab. 37	12-2	MW	53	Koucky
	Quiz 37	12	TT	76	Koucky
	Lab. 38	2-4	MW	53	
	Quiz 38	4	MW	76	

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Limited to students in engineering curricula. Prerequisite: Chem. 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. P	11	TT	210	Huitema
	Lab. 41	8-10	MW	53	Wells
	Quiz 41	11	MW	76	Wells
	Lab. 42	10-12	MW	53	Huitema
	Quiz 42	9	WF	80	Huitema
	Lab. 43	1-3	MW	53	Koranda
	Quiz 43	3	WF	75	Koranda
	Lab. 44	9-11	TT	53	Harris
	Quiz 44	10	MW	76	Harris
	Lab. 45	2-4	TT	53	Huitema
	Quiz 45	3	MF	76	Huitema

[1]Credit in Chem. 104 will not be granted to students who have received credit in Chem. 105 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- For all students who are not eligible for Chem. 104 or 106. Prerequisite: Chem. 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. G	2	MW	204	Bachrach
	Lab. 51	8-10	MWF	53	Hedberg
	Quiz 51	9	TT	76	Hedberg
	Lab. 52	10-12	MWF	53	Bachrach
	Quiz 52	11	TT	80	Bachrach
	Lab. 53	2-5	TT	53	Bachrach
	Quiz 53	12	WF	75	Bachrach
	Lab. 54	12-2	MWF	53	R. Miller
	Quiz 54	12	TT	80	R. Miller

[1]Credit in Chem. 105 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 106. INORGANIC CHEMISTRY:- Descriptive chemistry of the metals and metalloids with application of principles. For students in curricula of chemistry, chemical engineering, ceramic engineering, engineering physics, and chemistry majors who are not pre-medics. Prerequisite: Chem. 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. M	9	TT	210	Mueller
	Lab. 61	8-10	MWF	53	Mueller
	Quiz 61	8	TT	80	Mueller
	Lab. 62	2-5	TT	53	Mueller
	Quiz 62	3	MW	80	Mueller
	Lab. 63	1-3	MWF	53	Harris
	Quiz 63	2	TT	75	Harris

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS:- For students in chemistry or chemical engineering. Prerequisite: One unit of entrance credit in chemistry and a qualifying examination.

5 hours[1]	Lec. S	2	TT	204	Meloy
	Lab. 71	9-11	TT	53	Questiaux
	Quiz 71	10	MWF	80	Questiaux
	Lab. 72	3-5	TT	53	Meloy
	Quiz 72	2	MWF	80	Meloy

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Open to all students; required of those whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry, except students who qualify for Chem. 107 and 108. Prerequisite: Chem. 106.

5 hours	Lec. D	11	M	204	Mansfield
	Lab. 76	8-11	MWF	53	Mansfield
	Quiz 76	11	TT	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- For all pre-medical, pre-dental, and engineering students. Prerequisite: Chem. 104, 105, or 106.

5 hours	Lec. T	3	TT	204	Babler
	Lab. 81	9-12	MWF	54	King
	Quiz 81	10	Th	75	King
	Lab. 82	12-3	MWF	54	Sackheim
	Quiz 82	2	Th	76	Sackheim
	Lab. 83	2-5	MWF	54	King
	Quiz 83	2	Tu	76	King

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in chemical engineering and chemistry curriculum. Prerequisite: Chem. 110 or satisfactory record in Chem. 107 and 108.

Chem. 124. QUANTITATIVE ANALYSIS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. G	2	MW	210	Babler
	Lab. 86	8-11	MWF	54	Babler
	Quiz 86	2	F	75	Babler

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- For students in home economics and pre-medical courses. Prerequisite: Chem. 105 or 110.

5 hours	Lec. E	12	WF	204	Crum
	Exam hour	12	M	204	
	Lab. 91	8-11	WF	52	Koranda
	Quiz 91	9	M	75	Koranda
	Lab. 92	2-5	WF	52	Crum
	Quiz 92	3	M	75	Crum
	Lab. 93	8-11	TT	52	Crum
	Quiz 93	10	F	76	Crum

Chem. 196. GENERAL CHEMISTRY:- Taken with Chem. 197, this constitutes a year course for students who do not expect to take any more chemistry. Satisfies the general education requirement in physical sciences for Liberal Arts students. Prerequisite: Two units of high school mathematics.

4 hours	Lec. N	10	TT	204	Meloy
	Lab. 66	9-12	M	50	Potempa
	Quiz 66	11	W	80	Potempa
	Lab. 67	1-4	F	50	Potempa
	Quiz 67	1	W	75	Potempa

Chem. 247. ELEMENTARY PHYSICAL CHEMISTRY:- For pre-medical students only. Prerequisite: Chem. 122 and 133; Physics 102 or 104, or equivalent; junior standing.

4 hours	Lec. F	1	MWF	204	Schrage
	Lab. 96	2-5	Tu	50A	Schrage

CIVIL ENGINEERING

C. E. 103. ROUTE SURVEYING:- Prerequisite: Credit in civil engineering summer camp.

3 hours	A	9-12	MWF	63
	B	2-5	MWF	63

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	F	1	MWF	63

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Credit	Section	Hours	Days	Room	Instructor
2 hours	A	2-4	TT	61 & 63	

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	C1	10	MWF	21	Williams
	E1	12	MWF	23	Eastwood
	G1	2	MWF	21	Jung
	J1	4	MWF	21	Eastwood
	P1	11	MTT	21	Jung
	T1	3	MTT	19	Williams

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	B1	9	MWF	24	O. Miller
	D1	11	MWF	19	Knudson
	E1	12	MWF	21	Jung
	F1	1	MWF	20	O. Miller
	G1	2	MWF	25	Dunne
	H1	3	MWF	25	O. Miller
	M1	9	MTT	25	Jung

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102

3 hours	C1	10	MWF	23	Eastwood
	E1	12	MWF	20	O. Miller
	H1	3	MWF	21	Eastwood

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	D1	11	MWF	25	Larson
	F1	1	MWF	18	Larson
	G1	2	MWF	18	Larson
	J1	4	MWF	24	Derrick

Econ. 136. ECONOMIC HISTORY OF THE UNITED STATES:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. For freshmen only.

3 hours	B1	9	MWF	23	Knudson
	C1	10	MWF	24	Gillett

Econ. 136. ECONOMIC HISTORY OF THE UNITED STATES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	MWF	18	J. Morris
	E1	12	MWF	19	Knudson
	F1	1	MWF	25	Berg
	G1	2	MWF	19	Knudson
	H1	3	MWF	18	J. Morris
	J1	4	MWF	18	J. Morris
	M1	9	MTT	20	Berg
	N1	10	MTT	20	Berg
	P1	11	MTT	16	Geldard
	Q1	12	MTT	16	Geldard
	S1	2	MTT	23	Gillett
	T1	3	MTT	23	Gillett
	U1	4	MTT	19	Williams

Econ. 138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE:- The evolution of the conomic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only.

3 hours	C1	10	MWF	16	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108; sophomore standing.

3 hours	B1	9	MW	33	Dunne
	Prac. I	9-11	F	33	Dunne
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick

EDUCATION

Ed. 100. THE AMERICAN PUBLIC SCHOOL:- An introduction to the study of education. Prerequisite: Sophomore standing.

2 hours	C1	10	MW	1113-CMC*	Ricks

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks

Ed. 101. NATURE OF THE TEACHING PROFESSION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	P1	11	TT	28	Ricks
	S1	2	TT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture and architectural engineering students only.

3 hours	E1	12	MWF	120	

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Physics 103; Math. 132; credit or registration in Math. 142 and Physics 104.

4 hours	Quiz B1	9	MWF	120	
	Lab. B	9-12	Th	121	

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

3 hours[1]	C1	10	MWF	206	F. Johnson
	E1	12	MWF	205	Jackman
[1]Students with 95	F1	1	MWF	205	Merten
or more credit hours	G1	2	MWF	227	Brown
receive only 2 hours credit.					

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. See note under Engl. 101.

3 hours[1]	B1	9	MWF	214	I. Miller
	C1	10	MWF	215	Love
[1]Students with 95	F1	1	MWF	222	Niederman
or more credit hours	H1	3	MWF	226	Merten
receive only 2 hours credit.					

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoyevsky's CRIME AND PUNISHMENT,

Engl. 103. INTRODUCTION TO FICTION:- E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101. (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	E1	12	MWF	212	Kogan
	F1	1	MWF	226	Wright
	G1	2	M	226	Van Keuren
			WF	229	
[1]Students with 95 or more credit hours receive only 2 hours credit.	H1	3	MWF	203	Greenwald
	M1	9	MTT	209	Leonhard
	P1	11	M	203	Kerwick
			TT	205	

Engl. 113. AMERICAN LITERATURE:- A survey of American literature with lectures on the historical and cultural background from 1620 to the Civil War. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	E1	12	MWF	202	Donohue
	G1	2	MWF	211	Kenny
	M1	9	MTT	229	Willett

Engl. 114. AMERICAN LITERATURE:- A survey of American literature with lectures on the historical and cultural background from the Civil War to the 20th Century. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	B1	9	MWF	223	Stronks
	D1	11	MWF	211	Lease

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPI three plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, LIFE OF JOHNSON, RASSELAS. Particularly recommended for stu dents in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for Engl. 121 in addition to Engl. 101, 102, and 103. This course, plus Engl. 122, satisfies the humanities requirement in general education. Pre-requisite: Sophomore standing, or exemption from Rhet. 102.

4 hours	D1	11	TWTF	203	Waller

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Words-worth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and two novels. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for Engl. 122 in addition to Engl. 101, 102, and 103. This course, plus Engl. 121, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhet. 102.

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	201	Van Keuren

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	C1	10	MWF	205	Vest

FRENCH

French 101. ELEMENTARY COURSE:- For students who have no credit in French. No credit toward graduation is given for French 101 without French 102.

4 hours[1]	A1	8	TWTF	224	Skogen
	A2	8	TWTF	226	Lein
	B1	9	TWTF	224	Lein
[1]Students with 95	C1	10	TWTF	224	Skogen
or more credit hours	D1	11	TWTF	224	Lein
receive only 3 hours	E1	12	TWTF	224	Skogen
credit.	G1	2	TWTF	224	Lenihan
	H1	3	TWTF	224	Lenihan
	J1	4	TWTF	226	Cowles

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	B1	9	TWTF	226	Skogen
	E1	12	TWTF	226	Cowles
	H1	3	TWTF	228	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 103. MODERN FRENCH:- Prerequisite: French 102, or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	228	Lein
	G1	2	TWTF	228	Cowles

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	A3	8-10	MWF	137
	A4	8-10	MWF	141
	B1	10-12	MWF	135
	B3	10-12	MWF	137
	B4	10-12	MWF	141
	C1	12-2	MWF	135
	C3	12-2	MWF	137
	C4	12-2	MWF	141
	D1	2-4	MWF	135
	D2	2-4	MWF	136
	D3	2-4	MWF	137
	D4	2-4	MWF	141
	E2	4-6	MWF	136
	E4	4-6	MWF	141
	F1	8-11	TT	135
	F2	8-11	TT	136
	F3	8-11	TT	137
	G1	2-5	TT	135
	G2	2-5	TT	136
	G3	2-5	TT	137

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane and solid geometry.

3 hours	A5	8-10	MWF	143
	B5	10-12	MWF	143
	C5	12-2	MWF	143
	D5	2-4	MWF	143
	F5	8-11	TT	143
	G5	1-4	TT	143

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-11	MF	145
	C6	12-3	MF	145
	F6	8-11	TT	145
	G4	2-5	TT	141

G. E. 108. ARCHITECTURAL PROJECTIONS:- Continuation of G. E. 107. Prerequisite: G. E. 107.

G. E. 108. ARCHITECTURAL PROJECTIONS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours	C7	12-3	MF	146	
	F7	8-11	TT	146	

G. E. 203. AIRCRAFT DRAFTING AND LOFTING:- Aircraft terminology, control, and reference surface systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting-plane, tapered, and double curved surfaces, airfoils, intersection; practices and standards. Prerequisite: G. E. 101 or 104, and 102.

3 hours	F4	8-11	TT	141	

G. E. 210. INDUSTRIAL PRODUCTION ILLUSTRATION:- Mechanical and free-hand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective for all engineering curricula. Prerequisite: G. E. 102 or 107 and 108.

3 hours	G6	1-4	TT	145	

G. E. 212. GRAPHICAL CALCULATIONS:- Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper; construction and use of nomographs or alignment charts. For students in engineering; accepted as an approved elective in all engineering curricula. Prerequisite: G. E. 101, or equivalent; Math. 112, 114, and 122.

1 hour	A8	9	WF	113	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- Lectures and discussions. The geographic point of view; elements of landscape; planetary relations, climate, climatic regions, land-forms.

5 hours[1]	Lec. N1	10	TT	218	Finney
	Quiz A1	8	MWF	13	Finney
	Quiz B1	9	MWF	13	Finney
[1]Students with 95	Quiz E1	12	MWF	13	Finney
or more credit hours	Quiz G1	2	MWF	13	Finney
receive only 4 hours	Lec. D1	11	WF	218	Cutshall
credit.	Quiz A2	8	MWF	14	Kusch
	Quiz F1	1	MWF	13	Cutshall
	Quiz G2	2	MWF	14	Cutshall
	Quiz Q1	12	MTT	14	Kusch

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	D1	11	MWF	14	Colby
	N1	10	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for Commerce students but open to others except those having credit in Geog. 106.

3 hours[1]	C1	10	MWF	13	Cutshall

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geog. 101, or consent of instructor.

3 hours	C1	10	MWF	146	Kusch
	D1	11	MWF	146	Kusch
	S1	2	TT	146	Kusch
		3	Th	146	Kusch

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Cultural course. Lectures, quiz, and laboratory, one half-day field trip required. Geol. 101 and 102 meet the general education requirement in the physical sciences in the College of Liberal Arts and Sciences.

4 hours[1]	Lec. Q	12	TT	204	R. Karpinski
	Quiz N	10	Th	42	Burkholder
	Quiz E_1	12	W	42	Burkholder
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz E_2	12	F	42	Burkholder
	Quiz U	4	Th	42	Burkholder
	Quiz H	3	W	42	R. Karpinski
	Lab. 1	9-11	Tu	42	Burkholder
	Lab. 2	8-10	Th	42	R. Karpinski
	Lab. 3	3-5	M	42	R. Karpinski
	Lab. 4	2-4	Th	42	Burkholder
	Lab. 5	2-4	F	42	Burkholder

Geol. 102. HISTORICAL GEOLOGY:- Prerequisite: Geol. 101, or D. G. S. 111.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. S	10	MWF	42	Burkholder
	Lab. 1	2-4	Tu	42	Burkholder

[1] Students with 95 or more credit hours receive only 3 hours credit.

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Prerequisite: One semester of college chemistry.

3 hours	Lab. 1	8-10	MWF	42 & 53	Koucky

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the college of engineering.

3 hours	Lec. D	11	MWF	42	R. Karpinski
	Lec. F	1	MWF	42	R. Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- No credit toward graduation is given for German 101 without German 102.

4 hours[1]	A1	8	TWTF	220	Fuller
	B1	9	TWTF	220	Vardaman
	C1	10	TWTF	220	Vardaman
[1] Students with 95	C2	10	TWTF	221	Kauf
or more credit hours	D1	11	TWTF	220	Kauf
receive only 3 hours	E1	12	TWTF	220	Fuller
credit.	E2	12	TWTF	221	Willner
	G1	2	TWTF	220	
	H1	3	TWTF	220	
	H2	3	TWTF	223	Teichmann
	J1	4	TWTF	220	Teichmann

German 102. ELEMENTARY COURSE:- Continuation of German 101. Prerequisite: German 101, or one year of high school German.

4 hours[1]	B1	9	TWTF	221	Kauf
	D1	11	TWTF	221	Braunfeld
	G1	2	TWTF	221	Kauf
[1] Students with 95	H1	3	TWTF	221	Braunfeld
or more credit hours receive only 3 hours credit.					

German 103. INTERMEDIATE COURSE:- Prerequisite: German 102, or two years of high school German, or equivalent.

4 hours	B1	9	TWTF	222	Fuller

German 103. INTERMEDIATE COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C1	10	TWTF	222	Fuller
	D1	11	TWTF	222	Hartoch
	E1	12	TWTF	222	Braunfeld
	G1	2	TWTF	222	Braunfeld
	G2	2	TWTF	226	Teichmann
	H1	3	TWTF	222	Willner
	J1	4	TWTF	222	Willner

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Literary reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	C1	10	TWTF	223	Hartoch
	E1	12	TWTF	223	Teichmann
	G1	2	TWTF	223	Willner

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102, or two years of high school German; concurrent registration in German 103 or 104.

2 hours	F1	1	WF	223	Vardaman

HISTORY

Hist. 111. MODERN EUROPEAN HISTORY FROM THE RENAISSANCE TO 1848:- Europe from the age of the great discoveries to the close of the Napoleonic Wars.

4 hours[1]	Lec. E1	12	MW	218	Nicholson
	Quiz B	9	WF	20	Unfer
	Quiz F	1	MW	94	Nicholson
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz G	2	WF	20	Unfer
	Quiz M1	9	TT	17	Unfer
	Quiz N1	10	TT	82	Nicholson
	Quiz P	11	TT	25	Unfer
	Quiz Q	12	TT	94	Nicholson

Hist. 131. HISTORY OF ENGLAND TO 1688:- History of the British peoples to 1688.

3 hours[1]	Lec. C1	10	M	218	Bill
	Quiz E	12	WF	14	Unfer
	Quiz G	2	MW	82	S. Jones
[1]Students with 95 or more credit hours receive only 2 hours credit.	Quiz N	10	TT	23	S. Jones
	Quiz P	11	TT	24	Bill
	Quiz Q	12	TT	24	Bill

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundations, movement for independence, early years of the republic. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. D1	11	M	218	S. Jones
	Quiz C1	10	MW	82	S. Jones
	Quiz C2	10	WF	20	Unfer
	Quiz M1	9	TT	23	S. Jones
	Quiz P1	11	TT	23	S. Jones
	Quiz Q1	12	TT	82	Riddle

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO 1951:- A century of national life and organization. Prerequisite: Sophomore standing. Limited to students in the teacher training program.

3 hours	E1	12	MWF	97	Bill

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

3 hours	M1	9	MTT	82	Nicholson

HUMANITIES

(Offered for first time, Fall Semester 1953)

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course plus Humanities 102 satisfies the general education requirement in the humanities.

4 hours[1]	S1	2 3	TT TT	205	Lease

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course plus Humanities 152 satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	D1	11	TWTF	223	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	(For Women)				
	A	8	WF	213	Kostka
[1]Students with 95 or more credit hours receive only 1 hour credit.	C	10	WF	213	Kostka
	E	12	WF	213	Kostka
	(For Men)				
	B	9	MW	213	Staff
	M	9	TT	213	Staff
	C	10	MW	213	Staff
	N	10	TT	213	Staff
	P	11	TT	213	Staff
	F	1	WF	213	Staff
	G	2	WF	213	Staff
	T	3	TT	213	Staff
	U	4	TT	213	Staff

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	H	3	MW	213	Hilker
[1]Students with 95 or more credit hours receive only 1 hour credit.	(For Men and Women)				
	D	11	WF	213	Grisamore
	Q	12	TT	213	Grisamore
	S	2	TT	213	Grisamore

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

Hygiene 110. PUBLIC HEALTH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	P	11	TT	Gym	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	C1	10	MWF	18	J. Morris
	E1	12	MWF	25	Gillett

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	B1	9	MWF	19	Larson
	D1	11	MWF	20	Berg

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. Prerequisite: Math. 101.

3 hours	F1	1	MWF	103	Pennisi

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	111	Hornacek
	B1	9	MTWTF	111	Scholomiti
[1]Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.	B2	9	MTWTF	110	C. Olsen
	B3	9	MTWTF	102	Nolan
	B4	9	MTWTF	103	Dinkines
	B5	9	MWF	104	
	M1	9	M	101	Berglund
		9	TT	105	
	C1	10	MTWTF	111	Johannes
	C2	10	MTWTF	110	Berglund

Math. 103. INTRODUCATION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C3	10	MTWTF	102	
	C4	10	MWF	104	Gordon
	D1	11	MTWTF	111	C. Olsen
	D2	11	MTWTF	110	Gordon
	D3	11	MTWTF	102	Ondrak
	P1	11	M	101	Scholomiti
		11	TT	105	
	E1	12	MTWTF	111	Feinstein
	E2	12	MTWTF	110	Turner
	E3	12	MTWTF	102	Grenard
	E4	12	MWF	104	Hill
	F1	1	MWF	104	Ondrak
	G1	2	MTWTF	111	
	G2	2	MTWTF	110	Stelling
	G3	2	MWF	104	Gordon
	H1	3	MTWTF	111	Murphy
	H2	3	MTWTF	110	Lariviere
	H3	3	MWF	104	Alberti
	J1	4	MTWTF	111	Pennisi
	J2	4	MTWTF	110	Hill
	J3	4	MWF	104	Grenard

Math. 104. ELEMENTS OF ALGEBRA AND TRIGONOMETRY:- For pre-medical students who have entered with only one unit of high school algebra and who need credit in trigonometry as a prerequisite to physics. It does not serve as a prerequisite for Math. 122. Pre-medical students who enter with one and one-half units of algebra must take Math. 114. Prerequisite: High school algebra, 1 unit; plane geometry, 1 unit.

3 hours	F1	1	MWF	111	Lariviere

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

3 hours[1]	D1	11	MWF	105	Berglund
	Q1	12	M	101	Lariviere
		12	TT	105	
[1]Satisfies deficiency in solid geometry for engineering students; all other students receive full credit.	F1	1	MWF	105	Hill
	G1	2	MWF	105	Ondrak
	H1	3	MWF	105	Stelling
	J1	4	MWF	105	Murphy

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No credit	F1	1	MWF	110	Nolan

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art philosophy, and knowledge in general. Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	106	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

3 hours[1]	A1	8	MWF	102	Iverson
	B1	9	MWF	105	Hornacek
	*M1	9	MTT	106	Johannes
[1]Students with 95 or more credit hours receive only 2 hours credit.	C1	10	MWF	106	Nolan
	N1	10	M	101	Ondrak
		10	TT	106	
	D1	11	MWF	103	Frank
	E1	12	MWF	103	Corliss
*For Commerce students only.	F1	1	MWF	102	Johannes
	*F2	1	MWF	100	Alberti
	G1	2	MWF	102	C. Olsen
	G2	2	MWF	103	Scholomiti
	*S1	2	M	101	Alberti
		2	TT	105	
	H1	3	MWF	102	Grenard
	*H2	3	MWF	103	Turner
	T1	3	M	101	Hill
		3	TT	105	
	J1	4	MWF	102	Lariviere

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

2 hours[1]	L1	8	TT	102	Iverson
	L2	8	TT	104	Dinkines
	M1	9	TT	104	
[1]Students with 95 or more credit hours receive only 1 hour credit.	N1	10	TT	103	Hornacek
	N2	10	TT	104	Olsen
	P1	11	TT	103	Feinstein
	Q1	12	TT	103	Pennisi
	Q2	12	TT	104	Murphy
	S1	2	TT	102	Feinstein
	S2	2	TT	103	Turner
	T1	3	TT	102	Stelling
	T2	3	TT	103	Grenard
	U1	4	TT	102	Murphy
	U2	4	TT	103	Grenard

Math. 117. COMBINED FRESHMAN MATHEMATICS:- A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, ceramics, ceramic engineering, and architecture. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

Math. 117. COMBINED FRESHMAN MATHEMATICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	D1	11	MTWTF	104	Alberti
	J1	4	MTWTF	106	Stelling

Math. 122. ANALYTIC GEOMETRY:- Prerequisite: Math. 111 or 112 and 114 or 115.

4 hours[1]	B1	9	TWTF	101	Gordon
	C1	10	TWTF	101	Frank
	E1	12	TWTF	101	Nowlan
	G1	2	TWTF	101	Hartley
	H1	3	TWTF	101	Pennisi

[1] Students with 95 or more credit hours receive only 3 hours credit.

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Math. 111 or 112 and 114 or 115.

5 hours[1]	B1	9	MTWTF	100	Iverson
	C1	10	MTWTF	105	Corliss

[1] Students with 95 or more credit hours receive only 4 hours credit.

Math. 127. COMBINED FRESHMAN MATHEMATICS:- Continuation of Mathematics 117. Prerequisite: Math. 117.

4 hours	D1	11	TWTF	101	Hornacek
	E1	12	TWTF	106	Nolan

Math. 132. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Math. 122.

5 hours	C1	10	MTWTF	100	Hartley
	D1	11	MTWTF	100	Iverson
	E1	12	MTWTF	100	Frank
	G1	2	MTWTF	100	Nowlan
	H1	3	MTWTF	100	Feinstein
	J1	4	MTWTF	100	Turner

Math. 137. CALCULUS:- For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Math. 117 and 127, or consent of department.

3 hours	E1	12	MWF	123	Murphy

Math. 142. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Math. 132.

3 hours	A1	8	MWF	104	Dinkines
	C1	10	MWF	103	Nowlan

Math. 142. CALCULUS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	MWF	106	Berglund
	G1	2	MWF	106	Johannes

Math. 147. CALCULUS:- Continuation of Mathematics 137. Prerequisite: Math. 137.

3 hours	H1	3	MWF	106	Scholomiti

Math. 341. DIFFERENTIAL EQUATIONS:- Prerequisite: Math. 132 and 142, or Math. 137 and 147.

3 hours	E1	12	MWF	105	Dinkines

MECHANICAL ENGINEERING

M. E. 171. MECHANISM:- Prerequisite: G. E. 101 and registration in Physics 103.

2 hours	B2	10-12	WF	136
	C2	12-2	WF	136

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

3 hours	B	9	MWF	65

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing; G. E. 101 or 104.

3 hours	Lec. A	10	MF	65
	Lec. B	1	MF	65
	Lab. A	8-11	Tu	63 & 71
	Lab. B	8-11	Th	63 & 71
	Lab. C	2-5	Tu	63 & 71

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing; G. E. 101 or 104.

3 hours	Lec. A	11	TT	65
	Lec. B	3	MF	65
	Lab. A	8-11	Tu	64
	Lab. B	2-5	Th	64

M. E. 209. THERMODYNAMICS & HEAT TRANSFER:- Prerequisite: Physics 104 and Math. 142.

3 hours	H1	3	MWF	120

METALLURGICAL ENGINEERING

Met. E. 150. INTRODUCTION TO METALLURGY:- Prerequisite: Chem. 105 or equivalent.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F1	1	MWF	120	

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN DRILL AND THEORY:- Military organization; milit policy of the United States; evolution of warfare; weapons; leadersh drill and exercise of command. Students must register in the two ho theory course and in one drill period. Prerequisite: Approval of t Military Science department.

1 hour	Theory 1X	9	MW	116	
	Theory 2X	9	TT	116	
	Theory 3X	10	MW	116	
	Theory 4X	10	TT	116	
	Theory 5X	12	TT	116	
	Theory 6X	1	MW	116	
	Theory 7X	2	MW	116	
	Theory 8X	2	TT	116	
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 103. INFANTRY:- Organization; weapons; marksmanship; leadership, drill and exercise of command. Prerequisite: Approval of the Military Science department.

1 hour	Theory X	10	TT	230	McNulty
	Theory Y	2	TT	230	McNulty
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 133. CORPS OF ENGINEERS:- History and traditions of the Corps of Engineers; defense against chemicals; explosives and demolitions; hand tools and rigging; mines and booby traps; leadership, drill and exercise of command. Prerequisite: Enrollment in engineering or allied curriculum, and approval of the Military Science department.

1 hour	Theory X	9	TT	230	Murphy
	Theory Y	1	MW	230	Murphy
	Theory Z	3	TT	230	Murphy
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 163. ARTILLERY (ANTIAIRCRAFT):- Tactics and technique of the Antiaircraft Artillery Gun Battery; leadership; drill and exercise of command. Prerequisite: Approval of the Military Science department.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory X	9	MW	230	Severns
	Theory Y	10	MW	230	Severns
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 164. ARTILLERY (ANTIAIRCRAFT) SOPHOMORE DRILL AND THEORY:- Characteristics, capabilities and limitations of antiaircraft artillery automatic weapons; service of the piece, automatic weapons fire unit; introduction to field artillery, leadership, drill and exercise of command. Students must be registered in the two hour theory course, and in one drill period. Prerequisite: Mil. Sci. 101 and 102, or equivalent, and approval of the Military Science Department.

1 hour	Theory X	2	MW	230	Severns
	Theory Y	3	MW	230	Severns
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 205. ADVANCED INFANTRY:- Organization, weapons, Gunnery with Infantry weapons, map reading, leadership, drill, and exercise of command. Students must register in four hour theory course and in one drill period. Prerequisite: Mil. Sci. 103 and 104; successful completion of Armed Forces Qualification Test; physical qualification, Officer type physical examination; approval by Advanced Course Board; approval of Military Science department.

3 hours	Theory X	12	MTWT	230	McNulty
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 235. ADVANCED CORPS OF ENGINEERS:- Bridge design and classification; engineering signal communications; engineers combat intelligence; supply; military roads and runways; organization of combat divisions; tactics; vehicle operation and maintenance; water supply; leadership, drill and exercise of command. Students must be registered in the four hour theory course and in one drill period. Prerequisite: Mil. Sci. 133 and 134, enrollment in engineering or allied curriculum, have successfully completed certain Army tests and examinations, and approval of the Military Science Department.

3 hours	Theory X	11	MTWT	230	Rollins
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 265. ADVANCED ARTILLERY (ANTIAIRCRAFT):- Organization; gunnery; motors and transportations; Troop movement; leadership, drill and exercise of command. Students must be registered in the four hour theory course and one drill period. Prerequisite: Mil. Sci. 163 and 164, successfully complete certain Army tests and examinations, and approval of the Military Science department.

3 hours	Theory X	11	MTWT	116	Jessup
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

MUSIC

University Band:- The study and performance of a variety of band literature with public appearances in the form of concerts, convocations and selected University functions. Admission by consent of Director.

No credit		*1-3	TT	354	M. Zahrt

*In the case of unavoidable conflicts at 2:00 a student may still be permitted to register.

University Choir:- Admission by consent of Director.

No credit	Cl	2	MWF	354	H. Williams

PHILOSOPHY

Phil. 101 INTRODUCTION TO PHILOSOPHY:- Prerequisite: Sophomore standing.

3 hours	B	9	MWF	28	Page
	Cl	10	MWF	28	Page
	Fl	1	MWF	22	Page

Phil. 102. LOGIC:- Prerequisite: Sophomore standing.

3 hours	D	11	MWF	28	D. Morris
	E	12	MWF	28	D. Morris
	S	2	TT	25	D. Morris
		2	F	23	D. Morris
	Tl	3	MTT	28	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Prerequisite: Sophomore standing. Credit is not given for both Phil. 103 and 105.

2 hours	M	9	TT	28	Page

PHYSICAL EDUCATION FOR MEN

P.E.M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for the second, third, or fourth time should register for P.E.M. 102,103,104, respectively.

Credit	Section	Hours	Days	Room	Instructors
1 hour	C	10	MWF	Gym	Kristufek
	E	12	MWF	Gym	Kristufek
	F	1	MWF	Gym	Rader
	G	2	MWF	Gym	Kristufek
P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-					
1 hour	A	8	MWF	Gym	Keyser
	B1	9	MWF	Gym	
	B2	9	MWF	Gym	Montcalm
	C1	10	MWF	Gym	
	C2	10	MWF	Gym	Versen
	D1	11	MWF	Gym	Versen
	D2	11	MWF	Gym	Rader
	E	12	MWF	Gym	Berrafato
	F1	1	MWF	Gym	Frey
	F2	1	MWF	Gym	Gedvilas
	G	2	MWF	Gym	L. Miller
P. E. M. 112. INDIVIDUAL TUMBLING:-					
1 hour	C	10	MWF	Gym	Keyser
	D	11	MWF	Gym	Montcalm
*Classes will meet for 1½ hours.	E	12	MWF	Gym	Frey
	F	1	MWF	Gym	Fordham
	GH	*2	WF	Gym	Frey
	MN	*9	TT	Gym	
	NP	*10	TT	Gym	Montcalm
	PQ	*11	TT	Gym	L. Miller
P. E. M. 114. APPARATUS STUNTS:-					
1 hour	CD	*10	WF	Gym	Montcalm
	D	11	MWF	Gym	Keyser
	E	12	MWF	Gym	Montcalm
*Classes will meet for 1½ hours.	F	1	MWF	Gym	Montcalm
	H	3	MWF	Gym	Frey
	LM	*8	TT	Gym	
	PQ	*11	TT	Gym	Montcalm
P. E. M. 117. BOXING:-					
1 hour	A	8	MWF	Gym	Tighe
	B	9	MWF	Gym	Tighe

P. E. M. 117. BOXING:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
*Classes will meet for 1½ hours	C	10	MWF	Gym	Ryan
	D	11	MWF	Gym	Tighe
	E	12	MWF	Gym	Tighe
	F	1	MWF	Gym	Berrafato
	G	2	MWF	Gym	Berrafato
	MN	*9	TT	Gym	Kristufek
	NP	*10	TT	Gym	Tighe
	PQ	*11	TT	Gym	Kristufek

P. E. M. 118. WRESTLING:-

1 hour	A	8	MWF	Gym	Ryan
	B	9	MWF	Gym	Ryan
*Classes will meet for 1½ hours.	C	10	MWF	Gym	Mann
	D	11	MWF	Gym	Ryan
	E	12	MWF	Gym	Gedvilas
	F	1	MWF	Gym	Mann
	G	2	MWF	Gym	
	H	3	MWF	Gym	Kristufek
	PQ	*11	TT	Gym	Mann
	QR	*12	TT	Gym	Ryan

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-

1 hour	IM	*8	TT	Gym	Tighe
	ST	*2	TT	Gym	Ryan

*Classes will meet for 1½ hours.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	A	8	MWF	Gym	
	B	9	MWF	Gym	
*Classes will meet for 1½ hours	C	10	MWF	Gym	
	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	
	F	1	MWF	Gym	L. Miller
	G	2	MWF	Gym	
	H	3	MWF	Gym	Rader
	NP	*10	TT	Gym	Versen
	PQ	*11	TT	Gym	Gedvilas
	QR	*12	TT	Gym	Versen
	ST	*2	TT	Gym	Berrafato

P. E. M. 129. VOLLEYBALL:-

1 hour	A	**8	MWF	Gym	
	B	**9	MWF	Gym	Keyser
*Classes will meet for 1½ hours.	CD	*10	WF	Gym	Tighe
	DE	*11	WF	Gym	Frey
	NP	*10	TT	Gym	Gedvilas

**Adaptive ONLY

P. E. M. 129 VOLLEYBALL:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
* classes will meet for 1½ hours	PG	11*	TT	Gym	Berrafato
	QR	12*	TT	Gym	L. Miller
** Adaptive only	ST	2*	TT	Gym	L. Miller

P. E. M. 132. ARCHERY:-

1 hour	LM	8*	TT	Gym	
	ST	2*	TT	Gym	Rader

* classes will meet for 1½ hours.

P. E. M. 136. BADMINTON:-

1 hour	EF	12*	WF	Gym	
	FG	1*	WF	Gym	Jersen
* classes will meet	GH	2*	WF	Gym	Rader
for 1½ hours.	H	3**	MWF	Gym	Fordham
	MN	9*	TT	Gym	
** Adaptive only	NP	10*	TT	Gym	Kristufek
	PG	11*	TT	Gym	Ryan
	QR	12*	TT	Gym	Mann

P. E. M. 139. BACKYARD SPORTS:-

1 hour	HJ	3*	WF	Gym	Berrafato
	QR	12*	TT	Gym	Berrafato

* classes will meet for 1½ hours.

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

1 hour	DE	11*	WF	Gym	Gedvilas
	NP	10*	TT	Gym	Rader
* classes will meet	QR	12*	TT	Gym	Rader
for 1½ hours.					

P. E. M. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in physical education.

Credit	Section	Hours	Days	Room	Instructor
2 hours	C	10	MW		Jones
	D	11	WF		Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Gedvilas

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in physical education. (First eight weeks)

2 hours	A	8-10	MTWTF	Gym	Versen

P. E. M. 155. GYMNASTICS:- For students majoring in physical education. (First eight weeks)

2 hours	A	8-10	MTWTF	Gym	Frey

P. E. M. 156. TRACK AND FIELD:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Fordham

Rec. 174. CAMP COUNSELING:- For students majoring in physical education.

3 hours	E	12	MWF		Mann

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

1 hour	B1	9	MWF	Audit.	Moldenhauer
	B2	9	MWF	Audit.	Mart
*Classes will meet for 1½ hours.	D1	11	MWF	Audit.	Moldenhauer
	D2	11	MWF	Audit.	Mart
	E	12	MWF	Audit.	Moldenhauer
	PQ	*11	TT	Audit.	Mart
	QR1	*12	TT	Audit.	Moldenhauer
	QR2	*12	TT	Audit.	Mart

P. E. W. 102. MODIFIED ACTIVITIES:- Prerequisite: Recommendation from Health Service.

1 hour	F	1	MWF		N. Richardson

P. E. W. 105. ELEMENTARY RHYTHMS:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	8	MWF	Audit	Myers
	B	9	MWF	Audit	Myers
* classes will meet	C	10	MWF	Audit	Myers
for 1½ hours.	D	11	MWF	Audit	Myers
	ST	2*	TT	Audit	Myers

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P.E.W. 105 or consent of instructor.

1 hour	NP	10*	TT	Audit	Myers
	PQ	11*	TT	Audit	Myers

* classes will meet for 1½ hours.

P. E. W. 123. BASKETBALL:-

1 hour	LM	8*	TT	Audit	N Richardson

* classes will meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:-

1 hour	H	3	MWF	Audit	N Richardson
	MN	9*	TT	Audit	N Richardson

* Classes will meet for 1½ hours.

P. E. W. 130. BADMINTON:- Students to furnish personal equipment. (Supplemented by Archery)

1 hour	NP	10*	TT	Audit	N Richardson

* classes will meet for 1½ hours.

P. E. W. 135. ARCHERY:- (Supplemented by Varied Sports.) Students furnish personal equipment.

1 hour	E	12	MWF	Audit	N Richardson

P. E. W. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish boats, canoes, life jackets, etc.

1 hour	PQ	11*	TT	Audit	Moldenhauer

* classes will meet for 1½ hours.

P. E. W. 141. STUNTS AND TUMBLING:-

1 hour	G	2	MWF	Audit	N Richardson

P. E. W. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit	Moldenhauer

P. E. W. 144. FOLK DANCING:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	G	2	MWF	Audit.	Barton

P. E. W. 150. ORIENTATION:- For students majoring in physical education.

2 hours	E	12	MW		Barton

P. E. W. 151. BODY MECHANICS & GYMNASTICS:- For students majoring in physical education.

1 hour	C	10	MTWTF	Audit.	Moldenhauer

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT AND SOUND):- Prerequisite: Math. 114 or Math. 117.

5 hours	Lec. X	10	Tu	127	Staff
	Lec. Y	12	Tu	127	Staff
*Third hour to be arranged.	Lec. Z	2	Tu	127	Staff
	Quiz A1	8	MWF	120	Silkett
	Lab. A	*11-1	Tu	117-122	Silkett
	Quiz N1	10	M	113	Silkett
		10	TT	134	Silkett
	Lab. N	2-5	F	117-122	Livermore
	Quiz D1	11	MWF	120	Livermore
	Lab. D	2-5	Tu	117-122	Livermore
	Quiz F1	1	MWF	123	Livermore
	Lab. F	*11-1	Th	117-122	Livermore

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. X	11	Th	127	Staff
	Lec. Y	2	Th	127	Staff
	Quiz D1	11	M	113	Olanoff
		11	WF	134	Olanoff
	Lab. D	8-11	Tu	122-124	Olanoff
	Quiz G1	2	MWF	120	Anderson
	Lab. G	3-6	Th	122-124	Anderson

Physics 103. GENERAL PHYSICS (MECHANICS, HEAT, AND SOUND):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Math. 132 or Math. 137.

5 hours	Lec. X	10	Tu	127	Staff
	Lec. Y	12	Tu	127	Staff
	Lec. Z	2	Tu	127	Staff
	Quiz A1	8	MWF	134	Olanoff

Physics 103. GENERAL PHYSICS (MECHANICS, HEAT, AND SOUND):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. A	8-11	Th	117-122	Olanoff
	Quiz L1	8	M	113	Snyder
		8	TT	134	Snyder
	Lab. L	8-11	F	117-122	Snyder
	Quiz B1	9	MWF	134	Price
	Lab. B	3-6	M	117-122	Price
	Quiz M1	9	M	113	Snyder
		9	TT	134	Snyder
	Lab. M	8-11	W	117-122	Snyder
	Quiz C1	10	MWF	134	Olanoff
	Lab. C	3-6	W	117-122	Klapperich
	Quiz P1	11	MTT	134	Snyder
	Lab. P	11-2	W	117-122	Snyder
	Quiz F1	1	MWF	134	H. Johnson
	Lab. F	2-5	Tu	117-122	H. Johnson
	Quiz G1	2	MWF	134	Moulton
	Lab. G	2-5	Th	117-122	Moulton
	Quiz S1	2	M	113	Kromhout
		2	TT	134	Kromhout
	Lab. S	2-5	W	117-122	Kromhout
	Quiz T1	3	MTT	134	Skadeland
	Lab. T	2-5	F	117-122	Skadeland
	Quiz U1	4	MTT	134	Skadeland
	Lab. U	11-2	W	117-122	Skadeland

Physics 104. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS):- For students in engineering, mathematics, physics, chemistry. Prerequisite: Physics 103.

5 hours	Lec. X	11	Th	127	Staff
	Lec. Y	2	Th	127	Staff
	Quiz A1	8	MWF	123	Klapperich
	Lab. A	8-11	Th	122-124	Klapperich
	Quiz B1	9	MWF	123	Klapperich
	Lab. B	8-11	Tu	122-124	Klapperich
	Quiz D1	11	MWF	123	H. Johnson
	Lab. D	3-6	M	122-124	H. Johnson
	Quiz Q1	12	MTT	134	Anderson
	Lab. Q	11-2	F	122-124	Anderson

Physics 105. NURSES PHYSICS:- Prerequisite: Sophomore standing or consent of instructor.

4 hours	Quiz D1	11	M	125	Silkett
			WTF	113	Silkett

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	97	Gabis
	S1	2	MTT	97	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judiciary departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	97	Gabis
	M1	9	MTT	96	Barber
	S1	2	TT	24	Gabis
		3	Th	24	Gabis
	T1	3	MTT	97	Barber
	U1	3	Tu	24	Gabis
		4	TT	24	Gabis

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Pol. Sci. 150, or consent of department. Students may not receive credit for both Pol. Sci. 151 and 101 and 102.

3 hours	D1	11	MWF	97	Gabis
	N1	10	MTT	96	Barber

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Sophomore standing.

4 hours	Lec. B1	9	WF	218	Heilman
	Quiz C1	10	WF	97	Heilman
	Quiz D1	11	WF	96	Sanderson
	Quiz E1	12	WF	96	Sanderson

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz Q1	12	TT	28	Heilman
	Quiz S1	2	TT	22	Heilman
	Lec. P1	11	TT	218	Lipman
	Quiz D2	11	WF	21	Howard
	Quiz E2	12	WF	18	Howard
	Quiz F2	1	WF	19	Howard
	Quiz S2	2	TT	215	Sanderson

Psych. 125. INTRODUCTION TO FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis upon the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Prerequisite: Psych. 100, or its equivalent, or junior standing.

4 hours	Lec. C1	10	WF	210	Lipman
	Quiz D1	11	WF	94	Heilman
	Quiz M1	9	TT	215	Lipman
	Quiz N1	10	TT	24	Heilman

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhet. 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhet. 101 without further examination.

No credit	A1	8	MWF	206	Timmis
	B1	9	MWF	206	Timmis
*Admission by consent of Division of Humanities.	B2	9	MWF	205	J. Johnson
	C1	10	MWF	211	Kenny
	D1	11	MWF	206	Kenny
	D2	11	MWF	215	R. Mackin
	E1	12	MWF	209	J. Johnson
	*E2	12	MTWTF	211	Kirstein-Koenig
	F1	1	MWF	214	Kenny
	F2	1	MWF	221	R. Mackin
	G1	2	M	221	McGuire
			WF	216	
	G2	2	MWF	209	Hegie
	*G3	2	MTWTF	214	Kirstein-Koenig
	H1	3	MWF	219	McGuire
	H2	3	MWF	209	Hegie
	J1	4	MWF	215	McGuire
	N1	10	M	220	Carlson
			TT	201	
	S1	2	M	222	Carlson
			TT	201	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and in the expression of both oral and written English. Prerequisite: A passing grade on the placement examination or a passing grade in Rhet. 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	201	Atwood
	A2	8	MWF	203	I. Miller
[1]Students with 95 or more credit hours receive only 2 hours credit.	B1	9	MWF	215	Niederman
	B2	9	MWF	201	Atwood
	B3	9	MWF	*1113-CMC	Merten
	C1	10	MWF	202	Brown
	C2	10	M	223	I. Miller
*Offered at the Chicago Musical College.			WF	214	
	C3	10	MWF	201	Atwood
	C4	10	MWF	209	J. Johnson
	C5	10	MWF	229	Niederman
	D1	11	MWF	205	F. Johnson
	D2	11	M	220	Niederman
			WF	212	
	D3	11	M	223	Hipple
			WF	217	
	D4	11	MWF	202	Cassell
	E1	12	MWF	229	O'Connell
	E2	12	MWF	201	Waller
	E3	12	MWF	215	McGuire
	E4	12	MWF	206	Hegie
	E5	12	MWF	203	Greenwald
	E6	12	M	220	Munzer
			WF	214	
	F1	1	MWF	202	Cassell
	F2	1	MWF	212	J. Johnson
	F3	1	MWF	203	Munzer
	F4	1	MWF	206	Hipple
	F5	1	MWF	227	Griest
	G1	2	MWF	206	Greenwald
	G2	2	MWF	205	Jackman
	G3	2	MWF	215	Kogan
	G4	2	MWF	203	Donohue
	G5	2	MWF	202	Cassell
	H1	3	MWF	205	Jackman
	H2	3	MWF	212	Kirstein
	H3	3	MWF	214	Kogan
	H4	3	MWF	201	Donohue
	H5	3	MWF	229	O'Connell
	H6	3	MWF	202	Munzer
	J1	4	MWF	211	Kirstein
	J2	4	MWF	205	Greenwald
	J3	4	MWF	202	Donohue
	J4	4	MWF	221	O'Connell
	J5	4	MWF	206	Merten
	J6	4	MWF	209	Hegie
	J7	4	MWF	219	Munzer

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	L1	8	MTT	202	Freyer
	M1	9	M	222	Van Keuren
			TT	211	
	M2	9	MTT	202	Freyer
	M3	9	M	228	Hipple
			TT	217	
	N1	10	MTT	214	Leonhard
	N2	10	M	228	Hipple
			TT	227	
	N3	10	MTT	203	Waller
	N4	10	M	224	Willett
			TT	226	
	P1	11	MTT	212	Leonhard
	P2	11	M	227	Griest
			TT	211	
	P3	11	MTT	229	Willett
	Q1	12	M	221	Van Keuren
			TT	201	
	Q2	12	M	224	Gallagher
			TT	209	
	S1	2	M	228	Waller
			TT	227	
	S2	2	M	225	Griest
			TT	209	
	S3	2	M	223	Kerwick
			TT	212	
	S4	2	MTT	229	Willett
	T1	3	M	225	Kerwick
			TT	202	
	U1	4	MTT	224	Kerwick

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the composition and in the expression of both written and oral English. Prerequisite: Rhet. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	205	Stronks
	B1	9	MWF	203	Wright
	B2	9	MWF	211	Love
	B3	9	M	221	Vest
			WF	202	
	C1	10	MWF	227	Wright
	C2	10	M	221	Timmis
			WF	203	
	D1	11	MWF	214	Love
	D2	11	MWF	226	Wright
	F1	1	MWF	220	Love
	F2	1	MWF	201	Atwood
	F3	1	MWF	209	Timmis
	F4	1	MWF	219	I. Miller

[1] Students with 95 or more credit hours receive only 2 hours credit.

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	G1	2	MWF	212	O'Connell
	H1	3	MWF	206	Griest
	H2	3	MWF	215	R. Mackin
	J1	4	MWF	201	Cassell
	J2	4	MWF	212	Kogan
	J3	4	MWF	214	R. Mackin
	N1	10	MTT	212	Lease
	P1	11	M	221	Carlson
			TT	202	
	P2	11	M	228	Gallagher
			TT	209	
	Q1	12	MTT	214	Lease
	T1	3	M	221	Carlson
			TT	201	
	T2	3	M	223	Gallagher
			TT	211	
	U1	4	MTT	223	Gallagher

Rhet. 133. EXPOSITORY WRITING:- Individual conferences to be arranged. Prerequisite: Rhet. 101 and 102; sophomore standing.

3 hours	F1	1	MWF	211	F. Johnson

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhet. 102.

3 hours	C1	10	MWF	226	Oleksy
	D1	11	MWF	209	Brown
	F1	1	MWF	224	Oleksy
	F2	1	MWF	215	Brown
	G1	2	MWF	201	Oleksy
	H1	3	MWF	211	Oleksy
	S1	2	M	220	Leonhard
			TT	202	

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. S1	2	TT	218	McCall-Wax
	Quiz G1	2	MW	28	Wax
	Quiz H1	3	MW	20	Wax
	Quiz P1	11	TT	14	Wax
	Quiz Q1	12	TT	97	McCall
	Quiz T1	3	TT	215	Wax

[1] Students with 95 or more credit hours receive 3 hours credit

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to equip the beginning student with basic understanding of the physical, economic, political, social, and intellectual developments of the United States and to equip him for intelligent active participation in local and national affairs. Credit is not given for this course to a student with credit, or concurrent registration in Pol. Sci. 150 or 151, or History 151 or 152.

4 hours [1]	Lec. N1	12	M	218	Riddle
	Quiz B1	9	MWF	94	Bill
[1] students with 95 or more credit hours receive only 3 hours credit.	Quiz F1	1	MWF	97	Bill
	Quiz P1	11	MTT	82	Riddle

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

4 hours [1]	Lec. B1	9	M	218	Colby
	Quiz F1	1	MWF	14	Colby
[1] students with 95 or more credit hours receive only 3 hours credit.	Quiz M1	9	TTF	14	Colby

Soc. Sci. 114. THE UNITY OF KNOWLEDGE:- A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to direct his further education by his awareness of the integrative factors in current education and culture. Prerequisite: Sophomore standing and a 3.5 grade point average.

4 hours	P1	11	TWTF	13	Page

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. C1	2	WF	218	Klassen, others
	Quiz N1	10	TT	215	Lipman
	Quiz T1	3	TT	94	Klassen

SOCIOLOGY AND ANTHROPOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- A course designed to give the student an understanding of the basic principles employed in the scientific study of human society with application to contemporary social problems. Prerequisite: Sophomore standing.

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec Q1	12	Tu	218	Klassen
	Quiz C1	10	WF	17	McCall
	Quiz D1	11	WF	82	Klassen
	Quiz F1	1	WF	82	Klassen
	Quiz H1	3	WF	23	McCall
	Quiz S1	2	TT	94	Klassen

Sociol. 130 SOCIETY AND INDIVIDUAL DEVELOPMENT:- Importance of social factors in individual development. Nature of persons and relations to institutions, social order, and development. Prerequisite: Sociol. 100.

3 hours	Q1	12	MTT	18	Wax

Sociol. 140 SOCIAL CONTROL:- A course designed to give the student an appreciation and understanding of the socio-psychic processes by which individuals are taught, persuaded, compelled to conform to the usages and life-values of social groups. The subject of social control encompasses the whole field of sociological thought Prerequisite; Sociol. 100.

2 hours	N1	10	TT	25	Klassen

ANTHROPOLOGY

Anthrop. 107. INTRODUCTION TO ANTHROPOLOGY:- An introduction to general anthropology covering human origins and early man; race and racism; archaelogy and the beginnings of human civilization, linguistics, and the nature of culture with examples from primitive societies. Prerequisite: Sophomore standing.

3 hours	E1	12	MWF	94	McCall
	F1	1	MWF	28	McCall

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours [1]	A1	8	TWTF	225	Pinsky
	E1	12	TWTF	227	Pinsky

Spanish 101. ELEMENTARY SPANISH:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
[1]students with 95 or more credit hours receive only 3 hours credit	H1	3	TWTF	227	Tort
	J1	4	TWTF	227	Marsh

Spanish 102. ELEMENTARY SPANISH:- Continuation of Span. 101. Prerequisite: Span. 101, or one year of high school Spanish.

4 hours[1]	B1	9	TWTF	227	Pinsky
	J1	4	TWTF	225	Tort

[1]students with 95 or more credit hours receive only 3 hours credit.

Spanish 103. INTERMEDIATE SPANISH:- Prerequisite: Span. 102, or two years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	D1	11	TWTF	227	Pinsky
	E1	12	TWTF	225	Marsh
	H1	3	TWTF	225	Marsh

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Span. 103. Prerequisite: Span. 103, or three years of high school Spanish.

4 hours	C1	10	TWTF	225	Sanchez
	G1	2	TWTF	225	Marsh

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Prerequisite: Span. 102, or two years of high school Spanish. May be taken concurrently with Spanish 103.

2 hours	P1	11	TT	225	Sanchez

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Prerequisite: Span. 104, or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialect, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

Credit	Section	Hours	Days	Room	Instructor
No credit					
Sept 30 - Nov 13	C1	10	WF	219	Koenig
Nov 18 - Jan 15	C2	10	WF	219	Koenig
Sept 29 - Nov 12	P1	11	TT	219	Koenig
Nov 17 - Jan 14	P2	11	TT	219	Koenig

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Prerequisite: A passing grade in Rhet 101 placement examination, or a passing grade in Rhet 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours [1]	B1	9	MWF	216	Rudin
	B2	9	MWF	217	Koenig
	C1	10	MWF	216	Rudin
	C2	10	MWF	217	Goulson
	D1	11	MWF	216	Goulson
	E1	12	MWF	216	Hovde
	F1	1	MWF	216	Hovde
	F2	1	MWF	217	Goulson
	G1	2	MWF	217	Thompson
	G2	2	MWF	219	Crews
	H1	3	MWF	217	Thompson
	H2	3	MWF	216	Crews
	J1	4	MWF	216	Crews
	M1	9	MTT	219	Hovde
	N1	10	MTT	219	Hovde
	P1	11	MTT	217	Pitt
	Q1	12	MTT	217	Pitt
	S1	2	MTT	216	Pitt

[1] students with 95 or more credit hours receive only 2 hours credit.

Speech 105. VOICE AND ARTICULATION:- A drill course for improving the use of the normal speaking voice.

Credit	Section	Hours	Days	Room	Instructor
2 hours [1]	D1	11	MWF	219	Rigler

[1] students with 95 or more credit hours receive only 1 hour credit

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure.

Credit	Section	Hours	Days	Room	Instructor
2 hours [1]	N1	10	TT	217	Pitt

[1] students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
2 hours	P1	11	TT	216	Hovde

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	219	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretation, analysis, and oral reading of prose literature and verse.

2 hours [1]	N1	10	TT	216	Koenig
	S1	2	TT	219	Crews
	T1	3	TT	216	Crews

[1] students with 95 or more credit hours receive only 1 hour credit.

STUDENT COUNSELING BUREAU

READING AND STUDY SKILLS:- This program supplements individual counseling and aims at helping the student to: (a) develop effective methods of study, (b) increase speed and comprehension in reading college textbook material, and (c) make an optimum adjustment to the problems that college presents. The program lasts seven weeks.

Beginning the week of September 21, 1953

Credit	Section	Hours	Days	Room	Instructor
No credit	A	10	MW	300	Staff
	B	10	TT		
	C	11	MW		
	D	11	TT		
	E	12	MW		
	F	12	TT		
	G	1	MW		
	H	2	MW		
	I	2	TT		
	J	3	TT		

Beginning the week of November 9, 1953
Same as above

READING SKILLS:- The aim of this program is to evaluate and continue the development of reading ability through laboratory practice. The program lasts seven weeks.

READING SKILLS:- (concluded)

Beginning the week of September 21, 1953

No credit	A	10	MWF	300	Harford
	B	11	TTF		
	C	1	MWF		

Beginning the week of November 9, 1953
Same as above

INDIVIDUAL READING PRACTICE:- A limited number of students will be accepted for individual work in reading. Consent of counselor required. Hours by arrangement. No credit.

MATHEMATICS STUDY SKILLS:- This program attempts to develop basic understandings of the concepts and language of mathematics. The program lasts seven weeks, beginning the week of September 21, 195[illegible] Hours to be announced. No credit.

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math 142.

Credit	Section	Hours	Days	Room	Instructor
2 hours	M1	9	TT	113	
	Q1	12	TT	120	
	S1	2	TT	113	

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math 142. For electrical engineering students only.

4 hours	C1	10	MTuWF	123

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math 142.

5 hours	C1	10	MTWTF	120
	E1	12	MTWTF	113

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Math 122 or 127. For architectural students only.

3 hours	F1	1	MWF	113

T. A. M. 172. STRENGTH OF MATERIALS:- Prerequisite: T.A.M. 171. For architectural students only.

3 hours	J1	4	MWF	113

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T.A.M. 150.

3 hours	H1	3	MWF	113

TRIAL STUDY-LIST—TO BE KEPT BY THE STUDENT

Name in full..... Date.....
[Print] [Surname first; then given names]

College.....

Curriculum.....

Sem. Hrs. Earned (Copy from Coupon 3).....

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	Grade	M	T	W	T	F	S	Memoranda

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TIME TABLE

Second Semester, 1954

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TABLE OF CONTENTS

	Page
Pre-Registration Advisement Schedule, 1954	3
Calendar, Spring Semester, 1954	4
Spring Semester Registration Schedule	5
Legend for Section Letters	5
Chicago Undergraduate Division Calendar, 1954	6
Urbana Calendar, 1954	7
Accountancy	8, 9
Anthropology	51
Architecture	9, 10
Art	10, 11
Biological Sciences	11-14
Business Law	14
Chemistry	14-18
Civil Engineering	18, 19
Economics	19, 20
Education	20, 21
Electrical Engineering	21
English	21-23
French	23, 24
General Engineering	24, 25
Geography	25, 26
Geology	26, 27
German	27, 28
History	28, 29
Humanities	29
Hygiene	29, 30
Management	30, 31
Marketing	31
Mathematics	31-34
Mechanical Engineering	34, 35
Military Science and Tactics	35, 36
Music	36, 37
Philosophy	37
Physical Education for Men	37-41
Physical Education for Women	41, 42
Physics	43, 44
Political Science	44, 45
Psychology	45, 46
Rhetoric	46-49
Social Science	49, 50
Sociology	50
Spanish	51, 52
Speech	52, 53
Student Counseling Bureau	53, 54
Theoretical and Applied Mechanics	54, 55
Trial Study-List	56

PRE-REGISTRATION ADVISEMENT SCHEDULE
Spring Semester 1954

Liberal Arts and Sciences

Former Students

A - E	Monday	February 1	1 - 4 p.m.	Frame 14
F - K	Tuesday	February 2	9 -12 noon	Frame 14
L - Q	Tuesday	February 2	1 - 4 p.m.	Frame 14
R - Z	Wednesday	February 3	9 -12 noon	Frame 14

New Students

A - G	Wednesday	February 3	1 - 4 p.m.	Frame 14
H - Q	Thursday	February 4	9 -12 noon	Frame 14
R - Z	Thursday	February 4	1 - 4 p.m.	Frame 14

Commerce and Business Administration

Former Students Only

A - Fuz	Monday	February 1	1 - 4 p.m.	Room 27
Fva - Lep	Tuesday	February 2	9 -12 noon	Room 27
Leq - Sal	Tuesday	February 2	1 - 4 p.m.	Room 27
Sam - Z	Wednesday	February 3	9 -12 noon	Room 27

Engineering and Architecture

No regular pre-advisement period. Pre-advisement was accomplished during the first semester 1953-54.

Physical Education

No pre-advisement period is scheduled for Physical Education majors.

Second Semester, Spring 1954

Mon., Feb. 1 - Wed., Feb. 3	Orientation Period
Thurs., Feb. 4 - Sat., Feb. 6	Registration (Students registering for less than 12 hours report at 9:00 a.m., Sat., Feb. 6 for registration.)
Mon., Feb. 8	Instruction begins
Wed., Feb. 10, 1:00 p.m.	Earliest time at which program changes may be made
Mon., Feb. 15, 4:00 p.m.	Latest date for changes of study-list without fee
Fri., Feb. 19, 4:00 p.m.	Latest date for rebate in full
Fri., Mar. 26, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawal.
Fri., Apr. 2, 12:00 noon	Mid-semester grades due
Fri., Apr. 2, 4:00 p.m.	Latest date for rebate of one-half fees
Thurs., Apr. 15, 6:00 p.m.	Easter Vacation begins
Thurs., Apr. 22, 8:00 a.m.	Easter Vacation ends
Fri., Apr. 30, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal.
Fri., May 7	Honors Day
Mon., May 10	Students withdrawing on or after this date must petition for re-admission.
Sun., May 30	Memorial Day
Mon., May 31	Holiday
Tues., June 1 - Wed., June 9	Semester Examinations

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetical by names of departments (see Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

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1953/54 2

SECOND SEMESTER REGISTRATION SCHEDULE

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 12:00 noon, Saturday, February 6, 1954, will be assessed a late registration fee of $5.00.

A - Bus	Thursday, February 4	10:00 a.m.
But - Ez	Friday, February 5	9:00 a.m.
Fa - Han	Thursday, February 4	9:00 a.m.
Hao - Kok	Thursday, February 4	1:00 p.m.
Kol - Mbz	Thursday, February 4	11:00 a.m.
Mca - Rz	Thursday, February 4	3:00 p.m.
S - Tao	Friday, February 5	10:00 a.m.
Tap - Z	Thursday, February 4	2:00 p.m.

NEW STUDENTS

A - Fuz	Friday, February 5	2:00 p.m.
Fva - Lep	Friday, February 5	1:00 p.m.
Leq - Sal	Friday, February 5	3:00 p.m.
Sam - Z	Friday, February 5	11:00 a.m.

Students registering for less than 12 semester hours will register at 9:00 a.m., Saturday, February 6.

LEGEND FOR SECTION LETTERS*

5, 4, and 3 hour

Hour	courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, and Engineering Sciences.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

1954 CALENDAR

Second Semester (Spring, 1954)

Mon., Feb., 1 - Wed., Feb. 3	Orientation period
Thurs., Feb. 4 - Sat., Feb. 6	Registration
Mon., Feb. 8	Instruction begins
Tues., March 2	University Day (University opened, 1868)
Thurs., April 15, 6 p.m.	Easter vacation begins
Thurs., April 22, 8 a.m.	Easter vacation ends
Fri., May 7	Honors Day
Sun., May 30	Memorial Day
Mon., May 31	Holiday
Tues., June 1 - Wed., June 9	Semester Examinations

Summer Session - 1954

Fri., June 18 - Sat., June 19	Registration
Mon., June 21	Instruction begins
Sun., July 4	Independence Day
Mon., July 5	Holiday
Fri., Aug. 13 - Sat., Aug. 14	Summer Session Examinations

First Semester (Fall 1954)

Wed., Sept. 8 - Wed., Sept. 15	Orientation period
Thurs., Sept. 16 - Sat., Sept. 18	Registration
Mon., Sept. 20	Instruction begins
Wed., Nov. 24, 6:00 p.m.	Thanksgiving vacation begins
Mon., Nov. 29, 8:00 a.m.	Thanksgiving vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Wed., Dec. 22, 6:00 p.m.	Christmas vacation begins
Mon., Jan. 3, 8:00 a.m.	Christmas vacation ends
Fri., Jan. 14 - Sat., Jan. 22	Semester Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

1954 CALENDAR

Second Semester (Spring, 1954)

Tues., Feb. 2 - Fri., Feb. 5	Entrance Examinations
Mon., Feb. 8 - Wed., Feb. 10	Registration
Thurs., Feb. 11	Instruction begins
Tues., March 2	University Day (University opened, 1868)
Thurs., April 15, 1:00 p.m.	Easter vacation begins
Wed., April 21, 1:00 p.m.	Easter vacation ends
Fri., April 30	Honors Day (Classes dismissed at noon)
Mon., May 31	Memorial Day (Holiday)
Thurs., June 3 - Fri., June 11	Semester Examinations
Sun., June 20	Commencement Exercises

Summer Session - 1954

Tues., June 8 - Fri., June 11	Entrance Examinations
Fri., June 18 - Sat., June 19	Registration
Mon., June 21	Instruction begins
Mon., July 5	Independence Day (Holiday)
Fri., Aug. 13 - Sat., Aug. 14	Summer Session Examinations

First Semester (Fall, 1954)

Tues., Sept. 7 - Fri., Sept. 10	Entrance Examinations
Mon., Sept. 13 - Sat., Sept. 18	Freshman week and registration
Mon., Sept. 20	Instruction begins
Wed., Nov. 24, 1:00 p.m.	Thanksgiving vacation begins
Mon., Nov. 29, 1:00 p.m.	Thanksgiving vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Sat., Dec. 18, 12:00 noon	Christmas vacation begins
Mon., Jan. 3, 1:00 p.m.	Christmas vacation ends
Fri., Jan. 21 - Sat., Jan. 29	Semester Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Students who present one unit of bookkeeping for entrance should register in Accy. 102. They will not be allowed full credit in Accy. 101 unless high school bookkeeping credit can be dropped. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	17	Eggebrecht
	C1	10	MWF	17	Eggebrecht
	D1	11	MWF	16	Graff
	F1	1	MWF	21	Harris
	H1	3	MWF	23	Kabbes
	J1	4	MWF	23	Graff
	M1	9	MTT	23	Kabbes
	N1	10	MTT	23	Kabbes
	P1	11	MTT	19	Harris
	Q1	12	MTT	23	Yankow

[1]Students with 95 or more credit hours receive only 2 hours credit.

Accy. 102. PRINCIPLES OF ACCOUNTING:- Similar to Accy. 101. Students who have one unit entrance credit in bookkeeping should take this course rather than Accy. 101. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

2 hours[1]	S1	2	TT	25	Yankow

[1]Students with 95 or more credit hours will receive only 1 hour credit.

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101 or 102. Prerequisite: Accy. 101 or 102.

3 hours[1]	B1	9	MWF	25	Fox
	C1	10	MWF	25	Fox
	D1	11	MWF	22	Schneider
	E1	12	MWF	25	Fox
	F1	1	MWF	18	Graff
	G1	2	MWF	18	Graff
	H1	3	MWF	17	Harris
	N1	10	MTT	16	Harris
	T1	3	MTT	24	Schneider
	U1	4	MTT	24	Schneider

[1]Students with 95 or more credit hours receive only 2 hours credit.

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing, credit or registration in Econ. 102 or Econ. 108.

3 hours	B1	9	MWF	22	Yankow
	D1	11	MWF	23	Yankow

Accy. 106. ELEMENTARY COST ACCOUNTING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	E1	12	MWF	18	Eggebrecht
	G1	2	MWF	20	Eggebrecht

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: Credit or registration in Accy. 106.

3 hours	C1	10	MWF	22	Schneider
	G1	2	MWF	23	Kabbes

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	2	W	251
	Lab. A	2-5	MF	242
	Lab. B	9-11	TT	242
	Lab. C	2-5	MF	242
	Lab. D	2-5	TT	242

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. F	2	TT	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G.E. 108.

3 hours	Lec.	11	W	251
	Lab. A	2-5	MF	241
		2-4	W	241

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

3 hours	Lec.	9	W	251
	Lab. A	2-5	MF	241
		2-4	W	241
	Lab. B	9-11	TT	241
		10-12	W	241

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation and section in small buildings. Prerequisite: Arch. 132.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lab. A	9-12	MWF	242	

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	Lab. G	12	TT	251

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lab. F	3	TT	251

ART

Art 112. INTRODUCTION TO RENAISSANCE AND MODERN ART:- Cultural analysis of the interrelated fields of architecture, sculpture, and painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period.

3 hours	Sec. E	1	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Sec. C	10	MWF	251
	Sec. H	3	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture.

2 hours	Sec. A	8-11	TT	83
	Sec. B	2-5	TT	83

Art 182. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 181.

2 hours	Sec. A	2-5	TT	84
	Sec. B	1-4	MF	84
	Sec. C	2-5	TT	91
	Sec. D	9-12	MF	84

Art 183. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 182.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Sec. A	9-12	MF	91	
	Sec. B	8-11	TT	91	

Art 184. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 183.

2 hours	Sec. A	8-11	MF	83	
	Sec. B	12-3	MF	83	

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz. Students registering in lecture Q1 may take laboratory sections 1 through 6 only. Students registering in lecture E1 may take laboratory sections 7 through 13 only. Students registering in lecture F1 may take laboratory sections 14 through 20 only.

4 hours[1]	Lec. Q1	12	TT	218	Glassman
	Lab. 1	8-12	TT	46	Glassman
	Quiz 1	8	M	46	Glassman
	Lab. 2	10-12	TT	46	McQuate
	Quiz 2	10	M	46	McQuate
	Lab. 3	4-6	TT	46	Glassman
	Quiz 3	4	M	46	Glassman
	Lab. 4	8-10	WF	46	Spirakis
	Quiz 4	9	M	46	Spirakis
	Lab. 5	12-2	WF	46	McQuate
	Quiz 5	12	M	46	McQuate
	Lab. 6	2-4	WF	43	Little
	Quiz 6	12	M	43	Little
	Lec. E1	12	WF	218	Pickett
	Lab. 7	8-10	WF	48	Grubgeld
	Quiz 7	1	M	48	Grubgeld
	Lab. 8	10-12	WF	45	Grubgeld
	Quiz 8	11	M	45	Grubgeld
	Lab. 9	2-4	WF	48	Hered
	Quiz 9	2	M	48	Hered
	Lab. 10	4-6	WF	45	Little
	Quiz 10	4	M	45	Little
	Lab. 11	8-10	TT	45	Spirakis
	Quiz 11	8	M	48	Spirakis
	Lab. 12	2-4	TT	44	Little
	Quiz 12	3	M	44	Little
	Lab. 13	4-6	TT	48	Little
	Quiz 13	5	M	48	Little

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lec. F1	1	WF	218	Presley
	Lab. 14	11-12	WF	48	McQuate
	Quiz 14	11	M	48	McQuate
	Lab. 15	2-4	WF	46	Presley
	Quiz 15	3	M	45	Presley
	Lab. 16	4-6	WF	46	Presley
	Quiz 16	5	M	46	Presley
	Lab. 17	4-6	WF	48	Hered
	Quiz 17	4	M	48	Hered
	Lab. 18	8-10	TT	48	McQuate
	Quiz 18	9	M	48	McQuate
	Lab. 19	10-12	TT	44	Spirakis
	Quiz 19	10	M	44	Spirakis
	Lab. 20	4-6	TT	43	Presley
	Quiz 20	1	M	46	Presley

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. C1	10	WF	210	Rouffa
	Lab. 1	12-2	WF	48	Rouffa
	Quiz 1	12	M	48	Rouffa
	Lab. 2	2-4	TT	48	Glassman
	Quiz 2	3	M	48	Glassman
	Lab. 3	10-12	TT	48	Rouffa
	Quiz 3	10	M	48	Rouffa

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY):- Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 111.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. C1	2	M	46	Rouffa
	Lab. 1	2-4	TT	46	Rouffa
	Quiz 1	3	M	46	Rouffa

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses, the microscopic multicellular plants and animals as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Biology 121. MICROBIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. N1	10	TT	210	Madison
	Lab. 1	8-10	WF	43	McMillan
[1]Students with 95	Quiz 1	9	M	43	McMillan
or more credit hours	Lab. 2	10-12	WF	43	McMillan
receive only 3 hours	Quiz 2	10	M	43	McMillan
credit.	Lab. 3	12-2	WF	43	Madison
	Quiz 3	1	M	43	Madison
	Lab. 4	2-4	TT	43	Madison
	Quiz 4	2	M	43	Madison

Biology 126. ADVANCED GENERAL BACTERIOLOGY:- General technic, special apparatus, and methods. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 121; credit or registration in Chem. 105.

4 hours	Lec. H1	3	WF	Rm. to be announced	Madison
	Lab. 1	To be arranged			Madison
	Quiz 1	3	M	43	Madison

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals, and classifications. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. P1	11	TT	218	Hopkins
	Lab. 1	8-10	WF	44	Graham
[1]Students with 95 or	Quiz 1	1	M	44	Graham
more credit hours	Lab. 2	10-12	WF	44	Graham
receive only 3 hours	Quiz 2	11	M	44	Graham
credit.	Lab. 3	12-2	WF	44	Shank
	Quiz 3	12	M	44	Shank
	Lab. 4	2-4	WF	44	Graham
	Quiz 4	2	M	44	Graham
	Lab. 5	4-6	WF	44	Shank
	Quiz 5	4	M	44	Shank
	Lab. 6	8-10	TT	44	Graham
	Quiz 6	9	M	44	Graham
	Lab. 7	4-6	TT	44	Shank
	Quiz 7	5	M	44	Shank

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their functions and evolution. Lectures and laboratory. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. D1	11	MWF	218	Shank
	Lab. 1	10-1	TT	45	Grubgeld
	Lab. 2	3-6	TT	45	Grubgeld

Biology 141. VERTEBRATE PHYSIOLOGY:- This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organisms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R1	2	TT	65	Hopkins
	Lab. 1	8-10	TT	43	McMillan
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 1	8	M	43	McMillan
	Lab. 2	10-12	TT	43	McMillan
	Quiz 2	12	Tu	43	McMillan

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. H1	3	MWF	210	Sangster
	Lab. 1	8-10	MWF	45	Sangster
	Lab. 2	1-3	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; 45 credit hours.

3 hours	01	2	MWF	24	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Math. 111 or 112. Students may register in any lecture section but are required to take the quiz and laboratory in some one section.

5 hours[1]	Lec. M	9	TT	204	Bachrach
	Lab. 1	8-10	MWF	50	Seabright
[1]Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 hours credit receive only 3 hours credit.	Quiz 1	8	TT	74	Seabright
	Lab. 2	10-12	MWF	50	Bachrach
	Quiz 2	11	TT	74	Bachrach
	Lab. 3	1-3	MWF	50	Bachrach-Ullman
	Quiz 3	2	TT	74	Bachrach
	Lab. 4	3-5	MWF	50	Questiaux
	Quiz 4	4	TT	75	Questiaux

Chem. 102. GENERAL CHEMISTRY:- For all students who have had one year of high school chemistry. Prerequisite: One unit of high school chemistry or equivalent training. Students may register

Chem. 102. GENERAL CHEMISTRY:- (Concluded). for any lecture section, but are required to take the quiz and laboratory in some one section. Note: Students whose preparation in chemistry is inadequate are advised to register for Chem. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	Lec. M	9	TT	204	Bachrach
	Lab. 11	8-10	M	50	
[1]Students below the	Quiz 11	8	WF	75	
rank of senior re-	Lab. 12	10-12	M	50	Ullman
ceive 5 hours credit	Quiz 12	11	TT	76	Ullman
provided their high	Lab. 13	2-4	Tu	50	Harris
school chemistry has	Quiz 13	3	WF	74	Harris
not been used for en-	Lab. 14	11-1	Tu	50	Seabright
trance and their fi-	Quiz 14	1	WF	74	Seabright

nal grade in Chem. 102 is "C" or above. Students with 95 or more credit hours receive only 2 hours credit.

Chem. 103. GENERAL CHEMISTRY:- For engineering students. Prerequisite: One unit of high school physics or 2½ units of high school mathematics or credit in Math. 111 or 112. Students may register for any lecture section, but are required to take the quiz and laboratory in some one section.

4 hours[1]	Lec. D	11	WF	204	Hunt
	Lec. P	11	TT	204	Hunt
[1]Students who have	Lab. 21	8-10	WF	50	King
used their high	Quiz 21	9	TT	75	King
school chemistry for	Lab. 22	10-12	MW	50	Seabright
entrance credit are	Quiz 22	10	TT	74	Hunt
given only 3 hours	Lab. 23	12-2	WF	50	
credit for Chem.	Quiz 23	12	TT	74	
103. Students with	Lab. 24	2-4	WF	50	Hunt
95 or more credit	Quiz 24	3	TT	74	Hunt
hours receive only	Lab. 25	4-6	MW	50	Burkholder
3 hours credit	Quiz 25	5	TT	74	Burkholder
	Lab. 26	1-3	MW	50	King
	Quiz 26	2	TT	76	King
	Lab. 27	9-11	TT	50	
	Quiz 27	9	WF	75	
	Lab. 28	3-5	TT	50	Burkholder
	Quiz 28	2	TT	75	Burkholder
	Lab. 29	11-1	TT	50	King
	Quiz 29	12	WF	76	King
	Lab. 30	8-10	TT	50	Cowin
	Quiz 30	10	WF	80	Cowin

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Limited to students in engineering curricula. Prerequisite: Chem. 101, 102, or 103.

4 hours[1]	Lec. D	11	WF	210	Huitema
	Lec. P	11	TT	210	Huitema

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lab. 39	8-10	MW	53	Harris
	Quiz 39	8	TT	80	Harris
[1]Credit in Chem.	Lab. 40	10-12	WF	53	Ullman
104 will not be	Quiz 40	10	TT	80	Huitema
granted to students	Lab. 41	12-2	WF	53	Harris
who have received	Quiz 41	12	TT	80	Harris
credit in Chem. 105	Lab. 42	2-4	MF	53	Huitema
or 106. Students	Quiz 42	3	TT	75	Huitema
with 95 or more	Lab. 43	4-6	MW	53	R. Miller
credit hours re-	Quiz 43	5	TT	75	R. Miller
ceive only 3 hours	Lab. 44	2-4	TT	53	Questiaux
credit.	Quiz 44	2	WF	80	Questiaux
	Lab. 45	9-11	TT	53	Rennagel
	Quiz 45	9	MW	74	Rennagel
	Lab. 46	3-5	TT	53	Rennagel
	Quiz 46	4	WF	74	Rennagel
	Lab. 47	4-6	TT	53	Sackheim
	Quiz 47	3	MW	76	Sackheim
	Lab. 48	8-10	TT	53	Wells
	Quiz 48	11	WF	75	Wells
	Lab. 49	10-12	TT	53	Harris
	Quiz 49	10	WF	76	Harris
	Lab. 50	11-1	MW	53	Rennagel
	Quiz 50	12	TT	75	Rennagel

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- For all students who are not eligible for Chem. 104 or 106. Prerequisite: Chem. 101, 102, or 103.

5 hours[1]	Lec. G	2	WF	204	Stubblefield
	Lab. 51	8-10	MTT	53	Ullman
[1]Credit in Chem.	Quiz 51	8	WF	76	Ullman
105 will not be	Lab. 52	10-12	MWF	53	Stubblefield-Seabright
granted to students					
who have received	Quiz 52	11	TT	80	Stubblefield
credit in Chem. 104	Lab. 53	12-2	MWF	53	R. Miller
or 106. Students	Quiz 53	12	TT	76	R. Miller
with 95 or more	Lab. 54	3-5	MWF	53	Mansfield-Sackheim
credit hours re-					
ceive only 3 hours	Quiz 54	3	TT	76	Mansfield
credit.	Lab. 55	8-11	TT	53	Hedberg
	Quiz 55	9	WF	76	Hedberg
	Lab. 56	2-5	TT	53	Stubblefield
	Quiz 56	3	WF	80	Stubblefield

Chem. 106. INORGANIC CHEMISTRY:- Descriptive chemistry of the metals and metalloids with application of principles. For students in curricula of chemistry, chemical engineering, ceramic engineering, engineering physics, and chemistry majors who are not pre-

Chem. 106. INORGANIC CHEMISTRY:- (Concluded). medical students. Prerequisite: Chem. 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. M.	9	TT	210	Mueller
	Lab. 61	9-11	MWF	53	Mueller-Hedberg
	Quiz 61	10	TT	76	Mueller
	Lab. 62	1-3	MWF	53	Hedberg
	Quiz 62	2	TT	80	Hedberg
	Lab. 63	2-5	TT	53	Mueller
	Quiz 63	2	MW	75	Mueller

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105.
Students with 95 or more credit hours receive only 3 hours credit.

Chem. 108. GENERAL CHEMISTRY:- For students in chemistry or chemical engineering. Lectures, laboratory, and recitations. Prerequisite: Chem. 107.

5 hours[1]	Lec. S	2	TTh	204	Tyree
	Lab. 71	10-12	TTh	53	Tyree-Sackheim
	Quiz 71	10	MWF	75	Tyree
	Lab. 72	3-5	TTh	53	Tyree
	Quiz 72	2	MWF	76	Tyree

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Open to all students; required of those whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry, except students who qualify for Chem. 107 and 108. Prerequisite: Chem. 106.

5 hours	Lec. C	10	M	204	Mansfield
	Lab. 76	9-12	TThF	53	Mansfield
	Quiz 76	11	MW	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- For all pre-medical, pre-dental, and engineering students. Prerequisite: Chem. 104, 105, or 106.

5 hours	Lec. S	2	TTh	210	Babler
	Lab. 81	8-11	MWF	54	Gottlieb
	Quiz 81	11	Th	75	Wells
	Lab. 82	1-4	MWF	54	Gottlieb-Wells
	Quiz 82	12	M	74	Wells

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in chemical engineering and chemistry curriculum. Prerequisite: Chem. 110 or satisfactory record in Chem. 107 and 108.

5 hours	Lec. G	2	WF	210	Babler
	Lab. 86	9-12	MWF	54	Babler-Sackheim
	Quiz 86	2	M	74	Babler

Chem. 132. ELEMENTARY ORGANIC CHEMISTRY:- This course does not satisfy the organic chemistry prerequisite for Chem. 350, 354, or 355. Beginning course in organic chemistry especially for students in pre-nursing curriculum and in the continuation nursing curriculum. Prerequisite: Chem. 101 or 102, or equivalent.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. E	12	MW	210	Meloy
	Lab. 74	9-12	Tu	52	Questiaux
	Quiz 74	9	Th	74	Questiaux

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- For students in home economics and pre-medical courses. Prerequisite: Chem. 105 or 110.

5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	Crum
	Lab. 91	8-11	MW	52	Wells
	Quiz 91	9	F	74	Wells
	Lab. 92	9-12	TTh	52	Crum
	Quiz 92	10	F	74	Crum
	Lab. 93	2-5	MW	52	Crum
	Quiz 93	2	F	75	Crum

Chem. 197. GENERAL CHEMISTRY:- Continuation of Chem. 196. A student with a grade of "C" or better in Chem. 197 may be admitted to Chem. 104, 105, or 106. Credit for Chem. 196, 197, and 104, 105, or 106, shall not exceed ten hours. Prerequisite: Chem. 196.

4 hours	Lec. C	10	WF	204	Meloy
	Lab. 67	9-12	M	50	Cowin
	Quiz 67	10	Th	75	Cowin
	Lab. 68	1-4	W	50	Cowin
	Quiz 68	1	M	74	Cowin
	Lab. 69	12-3	F	50	Cowin
	Quiz 69	10	Tu	75	Cowin

Chem. 247. ELEMENTARY PHYSICAL CHEMISTRY:- For pre-medical students only. Prerequisite: Chem. 122 and 133; physics 102 or 104, or equivalent; junior standing.

4 hours	Lec. F	1	MWF	204	Schrage
	Lab. 96	9-12	Tu	50A	Schrage
	Lab. 97	2-5	Tu	50A	Schrage
	Lab. 98	8-11	Th	50A	Schrage
	Lab. 99	2-5	Th	50A	Schrage

CIVIL ENGINEERING

C.E. 115. GENERAL SURVEYING:- Use and care of surveying instruments; methods of making engineering surveys; computations of areas and

C.E. 115. GENERAL SURVEYING:- (Concluded). volumes; contour problems; transit stadia mapping methods. Prerequisite: G.E. 101 or 104; Math. 114.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A	8-11	TT	63	Chaderton

C.E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	63	Chaderton
	C1	10	MWF	63	Chaderton

C.E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

2 hours	A	2-4	TT	63	Chaderton

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	19	J. Morris
	D1	11	MWF	20	J. Morris
	E1	12	MWF	20	J. Morris
	F1	1	MWF	23	Jung
	H1	3	MWF	22	Jung
	J1	4	MWF	22	Jung
	N1	10	MTT	18	Ross
	P1	11	MTT	18	Ross
	Q1	12	MTT	22	O. Miller
	S1	2	MTT	22	O. Miller

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	C1	10	MWF	19	Berg
	E1	12	MWF	21	Berg
	J1	4	MWF	20	Berg
	M1	9	MTT	24	Gillett
	N1	10	MTT	24	Gillett

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	B1	9	MWF	21	O. Miller
	C1	10	MWF	21	Williams
	D1	11	MWF	25	O. Miller
	F1	1	MWF	24	Williams
	G1	2	MWF	25	Dunne
	H1	3	MWF	25	Eastwood
	J1	4	MWF	25	Eastwood

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	18	Larson
	D1	11	MWF	24	Eastwood
	E1	12	MWF	24	Eastwood
	F1	1	MWF	19	Larson
	H1	3	MWF	19	Larson

Econ. 136. Economic History of the United States:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. For freshmen only.

3 hours	B1	9	MWF	20	Knudson
	E1	12	MWF	17	Geldard
	F1	1	MWF	22	Ross
	H1	3	MWF	18	Ross
	P1	11	MTT	17	Geldard
	T1	3	MTT	21	Knudson
	U1	4	MTT	21	Knudson

Econ. 138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only.

3 hours	B1	9	MWF	16	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108; sophomore standing in Commerce.

3 hours	B1	9	MW	33	Dunne
	Prac. I	9-11	F	33	Dunne
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick
	N1	10	MTu	33	Derrick
	Prac. IV	9-11	Th	33	Derrick
	Q1	12	MTu	33	Williams
	Prac. V	11-1	Th	33	Williams

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- (Concluded). fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

Credit	Section	Hours	Days	Room	Instructor
2 hours	M1	9	TT	28	Ricks
	N1	10	TT	28	Ricks
	S1	2	TT	28	Ricks

Ed. 109. EDUCATIONAL PSYCHOLOGY:- The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Prerequisite: Psych. 100.

3 hours	F1	1	MWF	28	Ricks

ELECTRICAL ENGINEERING

E.E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture and architectural engineering students only.

3 hours	E1	12	MWF	144

E.E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Physics 103; Math. 132; credit or registration in physics 104 and Math. 142.

4 hours	B1	9	MWF	144
		8-11	Th	120
	G1	2	MWF	123
		2-5	Th	120

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

3 hours[1]	B1	9	MWF	222	Merten
	E1	12	M	220	F. Johnson
			WF	209	
	G1	2	M	221	Brown
			WF	202	
	J1	4	MWF	214	Jackman
	P1	11	M	224	J. Johnson
			TT	203	

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. See note under Engl. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	D1	11	M	226	Merten
			WF	215	
[1]Students with 95 or more credit hours receive only 2 hours credit.	F1	1	MWF	221	I. Miller
	G1	2	M	222	Matlaw
			WF	211	
	H1	3	MWF	209	Waller
	P1	11	M	222	Niederman
			TT	201	
	Q1	12	M	221	Nicholas
			TT	205	

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoyevsky's CRIME AND PUNISHMENT, E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101.

3 hours[1]	B1	9	M	226	Greenwald
			WF	209	
[1]Students with 95 or more credit hours receive only 2 hours credit.	C1	10	M	225	Wright
			WF	211	
	D1	11	MWF	229	Kerwick
	E1	12	MWF	229	Gallagher
	F1	1	MWF	222	Wright
	L1	8	MTT	209	Leonhard
	Q1	12	M	227	Kogan
			TT	215	

Engl. 113. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers, from 1620 to the Civil War. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	G1	2	MWF	229	Willett
	M1	9	M	227	Donohue
			TT	211	

Engl. 114. AMERICAN LITERATURE:- A survey of American Literature with emphasis on representative works of the major writers. From the Civil War to the present. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	A1	8	MWF	206	Stronks
	B1	9	MWF	229	Lease
	F1	1	MWF	224	Lease

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, three plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, LIFE OF JOHNSON, RASSELAS. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for Engl. 121 in addition to Engl. 101, 102, and 103. This course, plus Engl. 122, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours	G1	2	TT WF	212 227	Waller

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's PROSE AND POETRY, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and two novels. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for Engl. 122 in addition to Engl. 101, 102, and 103. This course, plus Engl. 121, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhet. 102.

4 hours	D1	11	TT WF	214 220	Kogan

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	C1	10	MWF	229	Vest

FRENCH

French 101. ELEMENTARY COURSE:- For students who have no credit in French. No credit toward graduation is given for French 101 without French 102.

4 hours[1]	A1	8	TWTF	224	Skogen
	C1	10	TWTF	224	Skogen
	E1	12	TWTF	224	Cowles
	H1	3	TWTF	224	Lenihan
	J1	4	TWTF	226	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	A1	8	TWTF	226	Lein
	B1	9	TWTF	224	Skogen
	D1	11	TWTF	226	Lein

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 102. ELEMENTARY COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	E1	12	TWTF	226	Lein
	G1	2	TWTF	224	Lenihan
	H1	3	TWTF	226	Cowles

French 103. MODERN FRENCH:- Prerequisite: French 102, or two years of high school French.

4 hours	B1	9	TWTF	226	Lein
	G1	2	TWTF	226	Cowles

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	228	Skogen

French 202. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

3 hours	D1	11	MWF	228	Schuyler

GENERAL ENGINEERING

G.E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	A3	8-10	MWF	137
	B1	10-12	MWF	135
	B3	10-12	MWF	137
	C1	12-2	MWF	135
	C3	12-2	MWF	137
	D1	2-4	MWF	135
	D3	2-4	MWF	137
	F1	8-11	TT	135
	G1	2-5	TT	135

G.E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane and solid geometry.

3 hours	A4	8-10	MWF	141
	A5	8-10	MWF	143
	B4	10-12	MWF	141
	B5	10-12	MWF	143
	C4	12-2	MWF	141
	C5	12-2	MWF	143
	D4	2-4	MWF	141
	D5	2-4	MWF	143
	F3	8-11	TT	137
	F4	8-11	TT	141

G.E. 102. ENGINEERING GEOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F5	8-11	TT	143	
	G3	2-5	TT	137	
	G4	2-5	TT	141	
	G5	2-5	TT	143	

G.E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145	
	F6	8-11	TT	145	

G.E. 108. ARCHITECTURAL PROJECTIONS:- Continuation of G.E. 107. Prerequisite: G.E. 107.

2 hours	A7	8-10	MWF	146	
	B7	10-12	MWF	146	
	C7	12-2	MWF	146	
	D7	3-5	MWF	146	

G.E. 210. INDUSTRIAL PRODUCTION ILLUSTRATION:- Mechanical and free-hand drawing in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective for all engineering curricula. Prerequisite: G.E. 102 or 107 and 108.

3 hours	G6	2-5	TT	145	

G.E. 212. GRAPHICAL CALCULATIONS:- Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper; construction and use of nomographs or alignment charts. For students in engineering; accepted as an approved elective in all engineering curricula. Prerequisite: G.E. 101, or equivalent; Math. 112, 114, and 122.

1 hour	B6	9	WF	145	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- Lectures and discussions. The geographic point of view; elements of landscape; planetary relations, climate, climatic regions, land-forms.

5 hours[1]	Lec. N1	10	TT	218	Cutshall-Finney
	Quiz B1	9	MW	14	Finney
			F	13	Finney
	Quiz D1	11	MWF	13	Cutshall

[1]Students with 95 or more credit hours receive only 4 hours credit.

Geog. 101. ELEMENTS OF GEOGRAPHY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz F1	1	MWF	13	Finney
	Quiz G1	2	MW	13	Finney
			F	14	Finney

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world.

3 hours[1]	Q1	12	MTT	14	Colby
	S1	2	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for Commerce students but open to others except those having credit in Geog. 106.

3 hours[1]	D1	11	MWF	14	Finney

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geog. 101, or consent of instructor.

3 hours	A1	8	MWF	13	Kusch
	M1	9	MTT	13	Kusch
	N1	10	MTT	13	Kusch
	Q1	12	TTF	13	Kusch
	S1	2	TTF	13	Kusch

Geog. 123. GEOGRAPHY OF ILLINOIS:- Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation.

3 hours	C1	10	MW	14	Cutshall
			F	13	Cutshall

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Cultural course. Lectures, quiz, and laboratory, one half-day field trip required. Geol. 101 and 102 meet the general education requirement in the physical sciences and the College of Liberal Arts and Sciences.

4 hours[1]	Lec. N	10	TT	204	R. Karpinski
	Quiz C1	10	M	42	Koucky
[1]Students with 95 or	Quiz C2	10	W	42	Koucky
more credit hours	Quiz C3	10	F	42	Koucky
receive only 3 hours	Quiz H	3	W	42	R. Karpinski
	Lab. 1	8-10	Tu	42	R. Karpinski

Geol. 101. PHYSICAL GEOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 2	8-10	Th	42	Koucky
	Lab. 3	3-5	M	42	Koucky
	Lab. 4	2-4	Th	42	Koucky

Geol. 102. HISTORICAL GEOLOGY:- Prerequisite: Geol. 101, or D.G.S. 141.

4 hours[1]	G	2	MWF	42	Burkholder
	Lab. 1	3-5	F	42	Burkholder

[1]Students with 95 or more credit hours receive only 3 hours credit.

Geol. 132. MINERALOGY:- Continuation of Geol. 131. A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: Geol. 131.

3 hours	A	8-10	MWF	42-53	Koucky

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	D	11	MWF	42	Karpinski
	F	1	MWF	42	Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- No credit toward graduation is given for German 101 without German 102.

4 hours[1]	A1	8	TWTF	220	Fuller
	B1	9	TWTF	220	Kauf
[1]Students with 95 or more credit hours receive only 3 hours credit.	C1	10	TWTF	220	Kauf
	E1	12	TWTF	220	Fuller
	E2	12	TWTF	223	Braunfeld
	G1	2	TWTF	220	Ritter
	G2	2	TWTF	221	Willner
	H1	3	TWTF	220	Ritter
	J1	4	TWTF	220	Braunfeld

German 102. ELEMENTARY COURSE:- Continuation of German 101. Prerequisite: German 101 or one year of high school German.

4 hours[1]	A1	8	TWTF	221	Kauf
	B1	9	TWTF	221	Fuller
[1]Students with 95 or more credit hours receive only 3 hours credit.	C1	10	TWTF	221	Hartoch
	D1	11	TWTF	221	Hartoch
	E1	12	TWTF	221	Teichmann
	H1	3	TWTF	221	Braunfeld
	J1	4	TWTF	221	Teichmann

German 103. INTERMEDIATE COURSE:- Prerequisite: German 102 or two years of high school German, or equivalent.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	222	Willner
	E1	12	TWTF	222	Willner
	G1	2	TWTF	222	Teichmann
	H1	3	TWTF	222	Teichmann

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Literary reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Vardaman
	C1	10	TWTF	222	Fuller
	E1	12	TWTF	216	Kauf
	G1	2	TWTF	223	Braunfeld
	H1	3	TWTF	223	Willner

German 210. MASTERPIECES OF GERMAN LITERATURE:- Introduction to German literature, its subjects, forms, and ideals. Prerequisite: German 104, 144, two years of college German, or equivalent.

3 hours	C1	10	MWF	223	Vardaman

HISTORY

Hist. 112. MODERN EUROPEAN HISTORY, 1815 TO THE PRESENT:- Development of European nationalism, liberalism, and imperialism; World War; Reconstruction.

4 hours[1]	Lec. M.	9	TT	218	Unfer
	Quiz E1	12	MW	16	Unfer
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz G1	2	MW	16	Unfer
	Quiz H1	3	MW	16	Unfer
	Quiz N1	10	TT	19	Unfer
	Lec. B1	9	WF	210	Nicholson
	Quiz E1	12	WF	94	Nicholson
	Quiz P1	11	TT	94	Nicholson
	Quiz Q1	12	TT	94	Nicholson

Hist. 132. HISTORY OF ENGLAND, 1688 TO 1953:- Modern history of the United Kingdom; colonial and imperial development.

3 hours[1]	G1	2	MWF	82	Jones
	N1	10	MTT	82	Jones

[1]Students with 95 or more credit hours receive only 2 hours credit.

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO 1953:- A century of national life and organization. Prerequisite: Sophomore standing.

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO 1953:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. C1	10	M	218	Riddle
	Quiz D1	11	MW	82	Jones
	Quiz F1	1	MW	82	Jones
	Quiz M1	9	TT	82	Riddle
	Quiz N1	10	TT	17	Bill
	Quiz P1	11	TT	16	Bill
	Quiz Q1	12	TT	28	Jones

Hist. 182. THE ANCIENT WORLD:- Rome. Prerequisite: Sophomore standing.

3 hours	R1	1	TTF	96	Nicholson

HUMANITIES

Humanities 102. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. This course plus Humanities 101 satisfies the general education requirement in the Humanities. To be offered 4 hours per week for 4 hours credit, II, to students in the undergraduate group; prerequisite: Humanities 101.

4 hours[1]	S1	2 3	TT	205	Lease

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 152. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, or 103. This course plus Humanities 151 satisfies the general education requirement in the humanities. To be offered 4 hours per week for 4 hours credit, II, to students in the undergraduate group; prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	D1	11	TWTF	223	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	(For Women)				
	A	8	WF	213	Kostka
[1]Students with 95 or more credit hours receive only 1 hour credit.	C	10	WF	213	Kostka
	E	12	WF	213	Kostka
	(For Men)				
	B	9	MW	213	O'Neil
	L	9	TT	213	Wallk
	M	10	TT	213	Wallk
	C	10	MW	213	O'Neil
	F	1	MW	213	Rosenthal
	G	2	MW	213	Rosenthal
	H	3	WF	213	Thomas
	J	4	WF	213	Thomas

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	T	3	TT	213	Hilker
[1]Students with 95 or more credit hours receive only 1 hour credit.	(For Men and Women)				
	D	11	WF	213	Grisamore
	Q	12	TT	213	Grisamore
	S	2	TT	213	Grisamore

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours[1]	P	11	TT	Gym	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	21	Jung
	F1	1	MWF	25	Gillett
	G1	2	MWF	21	J. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	C1	10	MWF	20	Knudson
	E1	12	MWF	19	Larson
	H1	3	MWF	20	Berg

MATHEMATICS

Math. 101. BASIC MATHEMATICS:- A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For L.A.S. students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include algebra and plane geometry.

3 hours	B1	9	MWF	100	C. Olsen
	P1	11	M	104	Nolan
			TT	110	
	F1	1	MWF	100	Johannes

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	102	Hornacek
	A2	8	MWF	101	Gordon
	B1	9	MWF	101	Berglund
	B2	9	MTWTF	102	Ockert
	B3	9	MTWTF	103	Engert
	C1	10	MTWTF	103	Engert
	C2	10	MTWTF	100	Ockert
	C3	10	MTWTF	102	Johannes
	D1	11	MTWTF	102	Murphy
	D2	11	MTWTF	103	C. Olsen
	Q1	12	M	104	Ondrak
			TT	106	
	E1	12	MTWTF	102	Nolan
	F1	1	MWF	101	Dinkines
	F2	1	MWF	104	C. Olsen
	S1	2	MTT	101	Hill
	G1	2	MTWTF	103	Stelling
	G2	2	MTWTF	102	Schmitz
	H1	3	MWF	101	Grenard
	H2	3	MTWTF	102	Alberti

[1] Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 103. INTRODUCATION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	H3	3	MTWTF	103	Turner
	J1	4	MTWTF	103	Hill
	J2	4	MTWTF	102	Scholomiti

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

3 hours[1]	B1	9	MWF	105	Ondrak
	E1	12	MWF	101	Hill
[1]Satisfies deficiency	G1	2	MWF	100	Engert
in solid geometry for	T1	3	MTT	105	Feinstein
engineering students;					
all other students receive full credit.					

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No credit	D1	11	MWF	100	Oekert

Math. 110. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Prerequisite: Math. 109.

4 hours	D1	11	TWTF	104	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

3 hours[1]	B1	9	MWF	110	Nolan
	*A1	9	M	104	Johannes
[1]Students with 95 or			TT	105	
more credit hours	M2	9	MTT	106	Dinkines
receive only 2 hours	N1	10	M	104	Berglund
credit.			TT	110	
	D1	11	MWF	101	Lariviere
*For Commerce stu-	E1	12	MWF	105	Grenard
dents only.	F1	1	MWF	103	Turner
	F2	1	MWF	105	Berglund
	F3	1	MWF	110	Pennisi
	*F4	1	MWF	111	Nolan
	S1	2	M	80	Ondrak
			TT	105	
	*S2	2	M	104	Grenard
			TT	106	
	G1	2	MWF	105	Scholomiti
	H1	3	MWF	106	Schmitz
	T1	3	MTT	110	Pennisi
	J1	4	MWF	101	Schmitz
	*U1	4	M	105	Lariviere
			TT	106	
	U2	4	MTT	104	Feinstein

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	L1	8	TT	101	Ockert
	M1	9	TT	100	Hornacek
[1]Students with 95 or	M2	9	TT	101	Olsen
more credit hours	N1	10	TT	101	Alberti
receive only 1 hour	N2	10	TT	106	Iverson
credit.	P1	11	TT	100	Hornacek
	P2	11	TT	101	Berglund
	Q1	12	TT	101	Engert
	Q2	12	TT	103	Schmitz
	Q3	12	TT	110	Alberti
	S1	2	TT	100	Scholomiti
	S2	2	TT	110	Turner
	T1	3	TT	100	Murphy
	U1	4	TT	101	Schmitz

Math. 117. COMBINED FRESHMAN MATHEMATICS:- A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

5 hours	A1	8	MTWTF	100	Iverson
	D1	11	MTWTF	105	Scholomiti
	E1	12	MTWTF	100	Stelling

Math. 122. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Math. 111 or 112 and 114 or 115.

4 hours[1]	B1	9	TWTF	104	Gordon
	G1	2	TWTF	104	Nowlan

[1]Students with 95 or more credit hours receive only 3 hours credit.

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Math. 111 or 112 and 114 or 115.

5 hours[1]	C1	10	MTWTF	111	Frank
	D1	11	MTWTF	111	Ondrak
[1]Students with 95 or	E1	12	MTWTF	111	Hornacek
more credit hours	G1	2	MTWTF	111	Alberti
receive only 4 hours	H1	3	MTWTF	111	Lariviere
credit.	J1	4	MTWTF	111	Grenard

Math. 127. COMBINED FRESHMAN MATHEMATICS:- Continuation of Mathematics 117. Prerequisite: Math. 117.

4 hours	C1	10	TWTF	104	Hartley
	E1	12	TWTF	104	Frank
	J1	4	TWTF	105	Stelling

Math. 132. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Math. 122.

Credit	Section	Hours	Days	Room	Instructor
5 hours	C1	10	MTWTF	105	Nowlan

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Math. 122 or 123.

3 hours	L1	8	MTT	104	Dinkines
	C1	10	MWF	106	Iverson
	D1	11	MWF	106	Berglund
	E1	12	MWF	106	Iverson
	F1	1	MWF	106	Murphy
	G1	2	MWF	106	Johannes
	U1	4	MTT	110	Pennisi

Math. 137. CALCULUS:- For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Math. 117 and 127, or consent of department.

3 hours	H1	3	MWF	100	Hill

Math. 142. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Math. 132.

3 hours	C1	10	MWF	110	Dinkines
	D1	11	MWF	110	Frank
	E1	12	MWF	110	Nowlan
	G1	2	MWF	110	Feinstein
	J1	4	MWF	106	Turner

Math. 147. CALCULUS:- Continuation of Mathematics 137. Prerequisite: Math. 137.

3 hours	H1	3	MWF	104	Murphy

Math. 161. STATISTICS:- Prerequisite: Math. 111 or 112; sophomore standing.

3 hours	F1	1	MWF	102	Lariviere

Math. 341. DIFFERENTIAL EQUATIONS:- Prerequisite: Math. 132 and 142, or Math. 137 and 147.

3 hours	E1	12	MWF	103	Pennisi

MECHANICAL ENGINEERING

M.E. 171. MECHANISM:- Prerequisite: G.E. 101 and registration in Physics 103.

M.E. 171. MECHANISM:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours	B2	10-12	WF	136	
	C2	12-2	WF	136	

M.E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

3 hours	B	9	MWF	65

M.E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing; G.E. 101 or 104.

3 hours	Lec. A	10	MF	65
	Lec. B	1	MF	65
	Lab. A	8-11	Tu	63 & 71
	Lab. B	8-11	Th	63 & 71
	Lab. C	2-5	Tu	63 & 71

M.E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing; G.E. 101 or 104.

3 hours	Lec. A	11	TT	65
	Lec. B	3	MF	65
	Lab. A	8-11	Tu	64
	Lab. B	8-11	Th	64
	Lab. C	2-5	W	64

M.E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 104 and Math. 142.

3 hours	H1	3	MW	144
		3-5	F	

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:- Combat formations; tactics of the rifle squad; first aid and hygiene; individual weapons and marksmanship; leadership, drill and exercise of command. Students must be registered in the two hour theory course and in one drill period. Prerequisite: Approval of the Military Science Department.

1 hour	Theory 1X	9	MW	116
	Theory 2X	10	MW	116
	Theory 3X	10	TT	116
	Theory 4X	12	TT	116
	Theory 5X	1	MW	116
	Theory 6X	2	MW	116

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 104. SOPHOMORE BASIC DRILL AND THEORY:- Tactics of weapons squads and sections; scouting and patrolling; mine warfare; explosives and demolitions; leadership, drill and exercise of command. Students must be registered in the two hour theory course and in one drill period. Prerequisite: Approval of the Military Science Department.

1 hour	Theory 1X	9	MW	230	McNulty
	Theory 2X	2	MW	230	McNulty
	Theory 3X	9	TT	230	McNulty
	Theory 4X	2	TT	230	McNulty
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 236. ADVANCED CORPS OF ENGINEERS:- Engineer supply; vehicle operation, maintenance, and motor movements; military teaching methods; tactics of engineer units; individual weapons and marksmanship; leadership, drill and exercise of command. Students must be registered in the four hour theory course, and in one drill period. Prerequisite: Enrollment in engineering or allied curriculum, have successfully completed certain army tests and examinations, and the approval of the Military Science Department.

3 hours	Theory X	11	MTWT	230	Rollins
	Drill	9, 10, 11, 12, 1, 2, 3	F	Drill Area	

Mil. Sci. 266. ADVANCED ARTILLERY (ANTIAIRCRAFT):- Gunnery, antiaircraft artillery tactics; communications; field artillery tactics; leadership, drill and exercise of command. Students must be registered in the four hour theory course, and in one drill period. Prerequisite: Have successfully completed certain army tests and examinations, and the approval of the Military Science Department.

3 hours	Theory Y	11	MTWT	116	Jessup
	Drill	9, 10, 11, 12, 1, 2, 3		Drill Area	

MUSIC

University Band:- The study and performance of a variety of band

University Band:- (Concluded). literature with public appearances in the form of concerts, convocations, and selected University functions. Admission by consent of director.

Credit	Section	Hours	Days	Room	Instructor
No credit		*1	TT	354	Zahrt

*Rehearsals continue for part or all of the two o' clock hour for those who are able to arrange their schedules to permit this, but attendance during the two o'clock period is not required.

University Choir:- Rehearsal and public performances of standard choral works; training in sight singing. Admission by consent of director.

No credit	D1	11	MWF	354	Williams

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Prerequisite: Sophomore standing.

3 hours	D1	11	MWF	97	Page
	F1	1	MWF	20	Page
	S1	2	MTT	19	Page

Phil. 102. LOGIC:- Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	97	D. Morris
	E1	12	MWF	97	D. Morris
	P1	11	TT	24	D. Morris
		12	Th	24	D. Morris
	S1	2	TTF	17	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Prerequisite: Sophomore standing. Credit is not given for both Phil. 103 and 105.

2 hours	P1	11	TT	13	Page
	Q1	12	TT	16	Page

PHYSICAL EDUCATION FOR MEN

P.E.M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for the second, third, or fourth time should register for P.E.M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Fordham
	D	11	MWF	Gym	L. Miller
	E	12	MWF	Gym	Kristufek
	F	1	MWF	Gym	Kristufek

P.E.M. 106. DEVELOPMENTAL ACTIVITIES:

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	8	MWF	Gym	Keyser
	B	9	MWF	Gym	Fordham
	C1	10	MWF	Gym	Mann
	C2	10	MWF	Gym	Rader
	D1	11	MWF	Gym	Keyser
	D2	11	MWF	Gym	Gedvilas
	E1	12	MWF	Gym	Bedard
	E2	12	MWF	Gym	L. Miller
	F	1	MWF	Gym	Versen
	G	2	MWF	Gym	Montcalm
	H	3	MWF	Gym	Versen

P.E.M. 112 INDIVIDUAL TUMBLING:

1 hour	A	8	MWF	Gym	Kreidler
	B	9	MWF	Gym	Kreidler
	C	10	MWF	Gym	Bedard
*Classes will meet for 1½ hours.	D	11	MWF	Gym	Bedard
	E	12	MWF	Gym	Frey
	F	1	MWF	Gym	Montcalm
	G	2	MWF	Gym	Bedard
	Mn	*9	TT	Gym	Montcalm

P.E.M. 114. APPARATUS STUNTS:

1 hour	B	9	MWF	Gym	Keyser
	C	10	MWF	Gym	Kreidler
*Classes will meet for 1½ hours.	D	11	MWF	Gym	Montcalm
	E	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Frey
**Students will be released early to participate in extra-curricular activities.	Np	*10	TT	Gym	Bedard
	Pq	*11	TT	Gym	Frey
	Qr	**12	TT	Gym	Frey

P.E.M. 117. BOXING:

1 hour	A	8	MWF	Gym	Tighe
	B	9	MWF	Gym	Ryan
*Classes will meet for 1½ hours.	C	10	MWF	Gym	Tighe
	D	11	MWF	Gym	Kristufek
	E	12	MWF	Gym	Tighe
	F	1	MWF	Gym	Tighe
	Lm	*8	TT	Gym	Tighe
	Np	*10	TT	Gym	Ryan
	Pq	*11	TT	Gym	Kristufek

P.E.M. 118. WRESTLING:

1 hour	A	8	MWF	Gym	Ryan

P.E.M. 118 WRESTLING: (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B	9	MWF	Gym	Mann
*Classes will meet for 1½ hours.	C	10	MWF	Gym	Ryan
	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	Ryan
**Students will be released early to participate in extra-curricular activities.	F	1	MWF	Gym	Mann
	G	2	MWF	Gym	Kristufek
	H	3	MWF	Gym	Gedvilas
	Mn	*9	TT	Gym	Tighe
	Qr	**12	TT	Gym	Ryan

P.E.M. 120. PERSONAL DEFENSE ACTIVITIES:

1 hour	Np	*10	TT	Gym	Kreidler
	Pq	*11	TT	Gym	Kreidler
*Classes will meet for 1½ hours.	St	* 2	TT	Gym	Kreidler

P.E.M. 123. WEIGHT LIFTING:

1 hour	A	8	MWF	Gym	Rader
	B	9	MWF	Gym	Tighe
*Classes will meet for 1½ hours.	C	10	MWF	Gym	L. Miller
	D	11	MWF	Gym	Kreidler
	E	12	MWF	Gym	Versen
**Students will be released early to participate in extra-curricular activities.	F	1	MWF	Gym	Ryan
	G	2	MWF	Gym	Versen
	H	3	MWF	Gym	Frey
	Pq	*11	TT	Gym	Berrafato
	Qr	**12	TT	Gym	Bedard
	St	*2	TT	Gym	Frey

P.E.M. 129. VOLLEYBALL:-

1 hour	A	**8	MWF	Gym	L. Miller
	B	**9	MWF	Gym	Rader
*Classes will meet for 1½ hours.	C	**10	MWF	Gym	Keyser
	Im	*8	TT	Gym	Montcalm
	Mn	*9	TT	Gym	Frey
** Adaptive only	Np	*10	TT	Gym	Kristufek
	Pq	*11	TT	Gym	Gedvilas
*** Students will be released early to participate in extra-curricular activities.	Qr	***12	TT	Gym	Versen

P.E.M. 132. ARCHERY:-

1 hour	Im	*8	TT	Gym	Rader
	Mn	*9	TT	Gym	Rader

*Classes will meet for 1½ hours.

P.E.M. 136. BADMINTON:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	Fg	*1	WF	Gym	Bedard
	Gh	*2	WF	Gym	Gedvilas
*Classes will meet for 1½ hours.	Hj	*3	WF	Gym	Montcalm
	Mn	*9	TT	Gym	Mann
	Np	*10	TT	Gym	Versen
**Students will be released early to participate in extra-curricular activities.	Pq	*11	TT	Gym	L. Miller
	Qr	**12	TT	Gym	Kristufek
	St	*2	TT	Gym	Fordham

P.E.M. 139. BACKYARD SPORTS:-

1 hour	Lm	*8	TT	Gym	Versen
	St	*2	TT	Gym	Gedvilas

* Classes will meet for 1½ hours.

P.E.M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

1 hour	De	*11	WF	Gym	Rader
	Ef	*12	WF	Gym	Gedvilas
*Classes will meet for 1½ hours.	Np	*10	TT	Gym	Rader
	Qr	**12	TT	Gym	Gedvilas

**Students will be released early to participate in extracurricular activities.

P.E.M. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P.E.M. 150. PROFESSIONAL ORIENTATION:- For students majoring in Physical Education.

2 hours	D	11	WF		Fordham

Recreation 170. OUTDOOR RECREATIONAL SPORTS:- For students majoring in Physical Education. (2nd eight weeks).

2 hours	A	8-10	MTWTF	Gym	Berrafato

Recreation 171. INDOOR RECREATIONAL SPORTS:- For students majoring in Physical Education. (1st eight weeks).

2 hours	A	8-10	MTWTF	Gym	Berrafato

Recreation 174. CAMP COUNSELING:- For student majoring in Physical Education.

3 hours	E	12	MWF	Mann

Recreation 176. PRINCIPLES OF RECREATION:- For students majoring in Physical Education

3 hours	D	11	MWF	Berrafato

PHYSICAL EDUCATION FOR WOMEN

P.E.W. 100. CONDITIONING ACTIVITIES:-

1 hour	B	9	MWF	Audit.	Moldenhauer
	C	10	MWF	Audit.	Moldenhauer
*Classes will meet	D	11	MWF	Audit.	Moldenhauer
for 1½ hours.	*Mn	9	TT	Audit.	Mart
	*Pq	11	TT	Audit.	Mart
**Students will be re-	*Qr	**12	TT	Audit.	Mart
leased early to par-	*St	2	TT	Audit.	Moldenhauer

ticipate in extracurricular activities.

P.E.W. 102. MODIFIED ACTIVITIES:- Prerequisite: Recommendation from Health Service.

1 hour	F	1	MWF	Audit.	N. Richardson

P.E.W. 105. ELEMENTARY RHYTHMS:-

1 hour	A	8	MWF	Audit.	Lazar
	C	10	MWF	Audit.	Lazar
*Classes will meet	D	11	MWF	Audit.	Lazar
for 1½ hours.	*Pq	11	TT	Audit.	Lazar

P.E.W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P.E.W. 105 or consent of instructor.

1 hour	*Np	10	TT	Audit.	Lazar
	*Rs	**12	TT	Audit.	Lazar

*Classes will meet for 1½ hours.

**Students will be released early to participate in extrcurricular activities.

P.E.W. 123. BASKETBALL:-

1 hour	*Lm	8	TT	Audit.	N.Richardson

*Classes will meet for 1½ hours.

P.E.W. 124. VOLLEYBALL:- (Supplemented by Archery - Students to furnish personal equipment).

P.E.W. 124. VOLLEYBALL:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	*Mn	9	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P.E.W. 125. SOFTBALL:-

1 hour	H	3	MWF	Audit.	N. Richardson

P.E.W. 130. BADMINTON:- Students to furnish personal equipment.

1 hour	E	12	MWF	Audit.	N. Richardson

P.E.W. 131. GOLF:- Students to furnish personal equipment.

1 hour	*Np	10	TT	Audit.	Mart

*Classes will meet for 1½ hours.

P.E.W. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish boats, canoes, life jackets, etc.

1 hour	*Pq	11	TT	Audit.	Moldenhauer

*Classes will meet for 1½ hours.

P.E.W. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P.E.W. 152. BASKETBALL AND SOFTBALL:- (Professional Course).

1 hour	G	2	MTWTF	Audit.	N. Richardson

P.E.W. 154. TUMBLING, APPARATUS, AND TENNIS:- (Professional Course).

2 hours	C	10	MTWTF	Audit.	N. Richardson

Dance 160. BEGINNING CONTEMPORARY DANCE:- (Professional Course).

2 hours	B	9	MTWTF	Audit.	Lazar

P.E.W. 166. GAMES FOR ELEMENTARY CHILDREN:- (Professional Course).

2 hours	A	8	MTWF	Audit.	Moldenhauer

Dance 236. FOLK DANCING:- (Professional Course).

1 hour	E	12	MWF	Audit.	Barton

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT AND SOUND):- Pre-requisite: Math 114 or Math 117.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. S	11	Tu	127	Staff
	Quiz D1	11	MWF	123	Livermore
*For architecture	Lab. D	8-11	Th	117	Olanoff
students only.	*Quiz F1	1	MWF	114	Livermore
	*Lab. F	3-6	Th	117	Livermore
	Quiz J1	4	MWF	134	Livermore
	Lab. J	3-6	Tu	117	Livermore

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS):- Pre-requisite: Physics 101.

5 hours	Lec. X	10	Th	127	Staff
	Lec. Y	12	Th	127	Staff
	Lec. Z	2	Th	127	Staff
	Quiz A1	8	MWF	123	Silkett
	Lab. A	3-6	M	122-124	Silkett
	Quiz B1	9	MWF	123	Silkett
	Lab. B	8-11	Th	122-124	Silkett
	Quiz E1	12	MWF	134	Olanoff
	Lab. E	8-11	Tu	122-124	Olanoff
	Quiz G1	2	MWF	113	Johnson
	Lab. G	2-5	Tu	122-124	Johnson

Physics 104. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS):- For students in engineering, mathematics, physics, and chemistry. Pre-requisite: Physics 103.

5 hours	Lec. X	10	Th	127	Staff
	Lec. Y	12	Th	127	Staff
	Lec. Z	2	Th	127	Staff
	Quiz A1	8	MWF	134	Klapperich
	Lab. A	8-11	Tu	122-124	Klapperich
	Quiz B1	9	MWF	134	Klapperich
	Lab. B	8-11	Th	122-124	Klapperich
	Quiz P1	11	MTT	134	Johnson
	Lab. P	11-2	F	122-124	Johnson
	Quiz F1	1	MWF	134	Price
	Lab. F	2-5	Th	122-124	Price
	Quiz S1	2	MTT	134	Anderson
	Lab. S	12-3	W	122-124	Anderson
	Quiz H1	3	MWF	134	Anderson
	Lab. H	3-6	Tu	122-124	Anderson

Physics 106. GENERAL PHYSICS (MECHANICS):- For students in engineering, mathematics, physics, and chemistry. Pre-requisite: Credit or registration in Math. 132 or Math. 137.

Physics 106. GENERAL PHYSICS (MECHANICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	10	M	127	Staff
	Lec. Y	12	M	127	Staff
	Lec. Z	2	M	127	Staff
	Quiz M1	9	TT	134	Snyder
	Lab. M	8-11	W	117	Snyder
	Quiz N1	10	TT	134	Snyder
	Lab. N	8-11	M	117	Snyder
	Quiz N2	10	TT	123	McNeil
	Lab. 2N	12-3	F	117	McNeil
	Quiz P1	11	TT	123	Skadeland
	Lab. P	8-11	F	117	Skadeland
	Quiz Q1	12	TT	134	McNeil
	Lab. Q	11-2	W	117	McNeil
	Quiz F1	1	WF	123	Skadeland
	Lab. F	8-11	Tu	117	Skadeland
	Quiz S1	2	TT	123	Moulton
	Lab. R	3-6	F	117	Silkett
	Quiz S2	2	TT	144	Kromhout
	Lab. S	3-6	W	117	Kromhout
	Quiz H1	3	WF	123	Olanoff
	Lab. H	3-6	M	117	Olanoff

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus.

4 hours	Lec. G1	2	MWF	208	Kromhout
	Lab. G	3-6	Th	208	Moulton

POLITICAL SCIENCE

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- A survey course covering such topics as the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems and organizations involved in maintaining peace.

3 hours	B1	9	MWF	28	Gabis
	S1	2	MTT	97	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWER:- Historical development of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party systems; nature, structure, powers and procedure of legislative and executive departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	28	Gabis
	M1	9	MTT	97	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWER:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	S1	2	TT	16	Gabis
		3	Th	16	Gabis
	T1	3	MTT	97	Barber
	U1	3	Tu	16	Gabis
		4	TT	16	Gabis

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state and local governments; foreign relations and national defense; taxation and finance; judiciaries and law enforcement; police power; regulation of commerce; communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Pol. Sci. 150, or consent of department. Students may not receive credit for both Pol. Sci. 151 and 101 and 102.

3 hours	E1	12	MWF	28	Gabis
	N1	10	MTT	96	Barber

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Sophomore standing.

4 hours	Lec. B1	9	WF	218	Heilman
	Quiz C1	10	WF	23	Heilman
	Quiz M1	9	TT	16	Heilman
	Quiz N1	10	TT	22	Heilman
	Quiz P1	11	TT	22	Heilman
	Lec. Q1	12	TT	210	Lipman
	Quiz E1	12	WF	23	Sanderson
	Quiz F1	1	WF	17	Sanderson
	Quiz G1	2	WF	22	Sanderson

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:- Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Econ. 170 or Math. 161. Prerequisite: Psych. 100, 103, or 106.

3 hours	E1	12	MWF	82	Feinstein

Psych. 145. INDUSTRIAL PSYCHOLOGY:- A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Prerequisite: Psych. 100.

Psych. 145. INDUSTRIAL PSYCHOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	28	Howard
	G1	2	MWF	28	Howard

Psych. 150. PERSONALITY AND HUMAN RELATIONS:- An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Prerequisite: Psych. 100 or equivalent.

3 hours	Lec. C1	10	WF	218	Lipman
	Quiz F1	1	M	17	Heilman
	Quiz G1	2	M	17	Heilman
	Quiz M1	9	Tu	17	Lipman
	Quiz N1	10	Tu	25	Lipman

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhet. 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhet. 101 without further examination.

No credit	A1	8	MWF	201	Timmis
	B1	9	MWF	201	Timmis
*Admission by consent of Division of Humanities.	C1	10	MWF	201	Kenny
	D1	11	MWF	201	Kenny
	*E1	12	MTWTF	201	Kirstein-Koeni
	F1	1	MWF	201	Kenny
	*G1	2	MTWTF	201	Kirstein-Koeni
	H1	3	MWF	201	Kenny
	J1	4	MWF	201	Mackin
	N1	10	MTT	202	S. Miller
	S1	2	MTT	202	Carlson

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: A passing grade on the Rhetoric 101 placement examination or a passing grade in Rhet. 100.

3 hours[1]	A1	8	MWF	202	Atwood
	B1	9	MWF	202	Willett
[1]Students with 95 or more credit hours receive only 2 hours credit.	B2	9	MWF	203	Hegie
	B3	9	M	220	Kerwick
			WF	216	
	B4	9	MWF	206	Stronks
	C1	10	MWF	203	Kerwick
	C2	10	M	222	Hipple
			WF	216	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C3	10	MWF	206	Greenwald
	C4	10	MWF	209	Hegie
	D1	11	MWF	202	Brown
	D2	11	MWF	203	F. Johnson
	D3	11	M	223	Hegie
			WF	209	
	D4	11	MWF	206	Lease
	E1	12	MWF	202	Cassell
	E2	12	MWF	203	Greenwald
	E3	12	MWF	205	Matlaw
	E4	12	MWF	206	McGuire
	F1	1	MWF	202	Kerwick
	F2	1	MWF	203	Brown
	F3	1	MWF	217	Hipple
	F4	1	MWF	215	Kogan
	G1	2	MWF	205	Jackman
	G2	2	MWF	206	Hand
	G3	2	M	223	Merten
			WF	209	
	H1	3	MWF	202	Matlaw
	H2	3	MWF	203	Merten
	H3	3	MWF	205	Jackman
	H4	3	MWF	206	McGuire
	H5	3	MWF	225	Hand
	J1	4	MWF	202	Crumley
	J2	4	MWF	203	McGuire
	M1	9	MTT	209	Kogan
	N1	10	MTT	211	Niederman
	P1	11	MTT	209	Leonhard
	Q1	12	MTT	209	J. Johnson
	Q2	12	M	222	Leonhard
			TT	203	
	S1	2	MTT	211	Niederman
	S2	2	M	224	Donohue
			TT	206	

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: Rhet. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	203	I. Miller
	A2	8	MWF	212	Greenwald
	B1	9	MWF	211	Atwood
	B2	9	MWF	212	I. Miller
	B3	9	MWF	215	Wright
	C1	10	MWF	212	Atwood
	C2	10	MWF	214	Timmis
	C3	10	MWF	215	I. Miller
	C4	10	M	224	Kirstein
			WF	202	

[1] Students with 95 or more credit hours receive only 2 hours credit.

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	MWF	211	Kirstein
	D2	11	MWF	212	Hipple
	D3	11	MWF	214	Willett
	D4	11	M	221	Freyer
			WF	219	
	E1	12	MWF	211	Atwood
	E2	12	MWF	212	Timmis
	E3	12	MWF	214	Mackin
	E4	12	MWF	215	Crumley
	F1	1	MWF	209	Waller
	F2	1	MWF	211	Hegie
	F3	1	MWF	212	Gallagher
	F4	1	MWF	214	Willett
	F5	1	MWF	223	Rudin
	G1	2	MWF	212	Mackin
	G2	2	MWF	214	Cassell
	G3	2	MWF	215	Crumley
	G4	2	MWF	225	McGuire
	G5	2	MWF	203	Wright
	G6	2	MWF	216	Rudin
	H1	3	MWF	211	Mackin
	H2	3	MWF	212	Cassell
	H3	3	MWF	214	Crumley
	H4	3	M	220	Gallagher
			WF	216	
	J1	4	MWF	205	Cassell
	J2	4	MWF	206	Gallagher
	J3	4	MWF	209	Matlaw
	L1	8	MTT	205	Nicholas
	L2	8	MTT	211	S. Miller
	M1	9	M	223	Nicholas
			TT	201	
	M2	9	M	224	S. Miller
			TT	202	
	N1	10	M	226	J. Johnson
			TT	203	
	N2	10	M	220	Nicholas
			TT	205	
	N3	10	M	221	Donohue
			TT	206	
	P1	11	MTT	215	Donohue
	P2	11	MTT	220	Carlson
	Q1	12	M	216	Carlson
			TT	202	
	Q2	12	M	223	S. Miller
			TT	206	
	Q3	12	M	224	Niederman
			TT	212	
	S1	2	M	220	Hipple
			TT	203	

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	T1	3	MTT	216	J. Johnson
	T2	3	MTT	215	Carlson
	U1	4	MTT	225	Waller

Rhet. 144. NARRATIVE WRITING:- Elements of narrative writing. Not a course in short story writing. Individual conferences to be arranged. Prerequisite: Rhet. 101 and 102; sophomore standing.

3 hours	F1	1	MWF	216	Freyer

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhet. 102.

3 hours	B1	9	MWF	205	Oleksy
	C1	10	MWF	205	Oleksy
	D1	11	MWF	205	Oleksy
	F1	1	MWF	205	Oleksy
	H1	3	MWF	227	Brown
	N1	10	M	228	Leonhard
			TT	209	

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. S1	2	TT	218	McCall-Wax
	Quiz D1	11	WF	17	McCall
[1]Students with 95 or more credit hours receive 3 hours credit.	Quiz G1	2	WF	19	Wax
	Quiz H1	3	MW	13	Wax
	Quiz P1	11	TT	14	Wax
	Quiz T1	3	TT	17	Wax

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to equip the beginning student with basic understanding of the physical, economic, political, social, and intellectual developments of the United States and to equip him for intelligent active participation in local and national affairs. Credit is not given for this course to a student with credit, or concurrent registration in Pol. Sci. 150 or 151, or History 151 or 152.

4 hours[1]	Lec. E1	12	M	218	Bill
	Quiz C1	10	MWF	28	Bill
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz F1	1	MWF	16	Bill
	Quiz Q1	11	TT	20	Riddle
		12	Tu	20	Riddle

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. B1	9	M	218	Colby
	Quiz F1	1	MWF	14	Cutshall
	Quiz M1	9	TTF	14	Colby
	Quiz N1	10	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. G1	2	WF	218	Klassen
	Quiz B1	9	WF	23	Lipman
	Quiz Q1	12	TT	17	Klassen

SOCIOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- A course designed to give the student an understanding of the basic principles employed in the scientific study of human society with application to contemporary social problems. Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	94	Klassen
	D1	11	MWF	94	Klassen
	F1	1	MWF	94	McCall
	G1	2	MWF	94	McCall

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Importance of social factors in individual development. Nature of persons and relations to institutions, social order, and development. Prerequisite: Sociol. 100.

3 hours	D1	11	MWF	96	Wax

Sociol. 140. SOCIAL CONTROL:- A course designed to give the student an appreciation and understanding of the socio-psychic processes by which individuals are taught, persuaded, compelled to conform to the usages and life-values of social groups. The subject of social control encompasses the whole field of sociological thought. Prerequisite: Sociol. 100.

2 hours	N1	10	TT	20	Klassen

ANTHROPOLOGY

Anthrop. 107. INTRODUCTION TO ANTHROPOLOGY:- An introduction to general anthropology covering human origins and early man; race and racism; archaeology and the beginning of human civilization, linguistics, and the nature of culture with examples from primitive societies. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	96	McCall
	P1	11	TT	96	McCall
		12	Th	96	McCall

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

4 hours[1]	B1	9	TWTF	227	Marsh
	C1	10	TWTF	226	Tort
[1]Students with 95 or more credit hours receive only 3 hours credit.	E1	12	TWTF	227	Pinsky
	G1	2	TWTF	228	Pinsky

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Prerequisite: Spanish 101, or one year of high school Spanish.

4 hours[1]	A1	8	TWTF	228	Marsh
	C1	10	TWTF	227	Marsh
[1]Students with 95 or more credit hours receive only 3 hours credit.	D1	11	TWTF	227	Tort

Spanish 103. INTERMEDIATE SPANISH:- Prerequisite: Spanish 102, or two years of high school Spanish.

4 hours	C1	10	TWTF	225	Sanchez
	E1	12	TWTF	225	Marsh

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103, or three years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	D1	11	TWTF	224	Pinsky
	H1	3	TWTF	228	Pinsky

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Prerequisite: Spanish 102, or two years of high school Spanish. May be taken concurrently with Spanish 103.

2 hours	P1	11	TT	225	Sanchez

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Spanish 202. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

Credit	Section	Hours	Days.	Room	Instructor
3 hours	D1	11	MWF	225	Sanchez

SPEECH

Group Remedial Speech:- Students with articulatory problems, particularly those with foreign dialect, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

No credit					
Feb. 16 - April 1	G1	2	MW	219	Koenig
April 6 - May 25	G2	2	MW	219	Koenig
Feb. 16 - April 1	H1	3	MW	217	Koenig
April 6 - May 25	H2	3	MW	217	Koenig

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Prerequisite: A passing grade in Rhet. 101 placement examination, or a passing grade in Rhet. 100.

3 hours[1]	B1	9	MWF	219	Pitt
	C1	10	MWF	217	Pitt
	D1	11	MWF	217	Thompson
	D2	11	MWF	216	Pitt
	E1	12	MWF	219	Dance
	F1	1	MWF	219	Dance
	F2	1	MWF	220	Crews
	G1	2	MWF	217	Thompson
	H1	3	MWF	219	Crews
	J1	4	MWF	223	Crews
	J2	4	MWF	219	Koenig
	P1	11	MTT	219	Goulson
	Q1	12	M	228	Hovde
			TT	217	
	S1	2	MTT	227	Hovde
	T1	3	MTT	229	Hovde
	U1	4	MTT	216	Hovde

[1]Students with 95 or more credit hours receive only 2 hours credit.

Speech 105. VOICE AND ARTICULATION:- A drill course for improving the use of the normal speaking voice.

2 hours[1]	C1	10	M	227	Rigler
			WF	219	

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	P1	11	TT	216	Hovde

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	M1	9	TT	219	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretation, analysis, and oral reading of prose literature and verse.

2 hours[1]	Q1	12	TT	219	Goulson
	T1	3	TT	219	Crews
[1]Students with 95 or more credit hours receive only 1 hour credit.	U1	4	TT	219	Crews

Speech 161. FUNDAMENTALS OF ACTING:- A study of the methods of acting with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Speech 141.

3 hours	T1	3	MTT	218	Goulson

Speech 164. RADIO SPEAKING:- Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. Prerequisite: Consent of instructor.

2 hours	N1	10-12	TT	WNAP	Koenig

STUDENT COUNSELING BUREAU

STUDY AND READING SKILLS:- This program supplements individual counseling and aims to help the student (a) develop effective study methods and (b) make an optimum adjustment to the problems that college presents. The program lasts seven weeks.

STUDY AND READING SKILLS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
No credit	Beginning the week of February 8, 1954				
	A	10	MW	300	
	B	10	TT	300	
	C	11	MW	300	
	D	11	TT	300	
	E	12	MW	300	
	F	12	TT	300	
	G	1	MWF	300	
	H	2	MWF	300	
	I	1	TT	300	
	Beginning the week of March 29, 1954				
	Same as above.				

READING SKILLS:- The aim of this program is to evaluate reading ability and develop it through laboratory practice. The program lasts seven weeks.

No credit	Beginning the week of February 8, 1954				
	A	10	MWF	300	Harford
	B	11	MTT	300	
	C	1	MWF	300	
	Beginning the week of March 29, 1954				
	Same as above.				

MATHEMATICS STUDY SKILLS:- This program attempts to develop basic understanding of the concepts and language of mathematics. The program lasts seven weeks.

No credit	Beginning the week of February 8, 1954			
	A	3	MW	300
	B	3	TT	300
	Beginning the week of March 29, 1954			
	Same as above.			

THEORETICAL AND APPLIED MECHANICS

T.A.M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 142.

2 hours	Q1	12	TT	123
	S1	2	TT	113

T.A.M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142. For electrical engineering students only.

T.A.M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	C1	10	MTWF	113	
	H1	3	MTWF	113	

T.A.M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequsite: Registration in Math. 142.

5 hours	B1	9	MTWTF	113	
	E1	12	MTWTF	113	

T.A.M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Math. 127. For architectural students only.

3 hours	F1	1	MWF	113	

TRIAL STUDY-LIST—TO BE KEPT BY THE STUDENT

Name in full..... Date.....
[Print] [Surname first; then given names]

College.....

Curriculum.....

Sem. Hrs. Earned (Copy from Coupon 3).....

Subject (I. e., Department)	Course No.	Credit Hours	Sec.	Grade	M	T	W	T	F	S	Memoranda

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TIME TABLE

First Semester, 1954-55

UNIVERSITY OF ILLINOIS

Chicago Undergraduate Division

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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 3
Calendar, First Semester, 1954-55..... 4
First Semester Registration Schedule..... 5
Legend for Section Letters..... 5
Chicago Undergraduate Division Calendar, 1954-55..... 6
Urbana Calendar..... 7
Accountancy..... 8,9
Anthropology..... 54
Architecture..... 9,10
Art..... 10,11
Biological Sciences..... 11-14
Business Law..... 14
Chemistry..... 14-19
Civil Engineering..... 19
Economics..... 19-21
Education..... 21
Electrical Engineering..... 21
English..... 22,23
French..... 23,24
General Engineering..... 24-26
Geography..... 26,27
Geology..... 27,28
German..... 28,29
History..... 29,30
Humanities..... 30,31
Hygiene..... 31,32
Management..... 32
Marketing..... 32
Mathematics..... 32-36
Mechanical Engineering..... 36,37
Military Science and Tactics..... 37,38
Music..... 38,39
Philosophy..... 39
Physical Education for Men..... 39-43
Physical Education for Women..... 43-45
Physical Sciences..... 45
Physics..... 45-47
Political Science..... 47,48
Psychology..... 48,49
Rhetoric..... 49-52
Social Sciences..... 52-54
Sociology..... 54
Spanish..... 54,55
Speech..... 55-57
Theoretical and Applied Mechanics..... 57,58

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PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester 1954-55

FORMER STUDENTS ONLY

Liberal Arts and Sciences

A - E	Monday	September 13	1 - 4 p.m.	Frame 14
F - K	Tuesday	September 14	9 - 12 noon	Frame 14
L - Q	Tuesday	September 14	1 - 4 p.m.	Frame 14
R - Z	Wednesday	September 15	9 - 12 noon	Frame 14

Commerce

A - E	Monday	September 13	1 - 4 p.m.	Room 27
F - K	Tuesday	September 14	9 - 12 noon	Room 27
L - Q	Tuesday	September 14	1 - 4 p.m.	Room 27
R - Z	Wednesday	September 15	9 - 12 noon	Room 27

Engineering and Architecture

No regular pre-advisement period. Pre-advisement was accomplished during the second semester 1953-54.

Physical Education

No pre-advisement period is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

First Semester, Fall 1954

Tues., Sept. 7 - Wed., Sept. 15	Orientation Period
Thurs., Sept. 16 - Sat., Sept. 18	Registration (Students registering for less than 12 hours report at 10:30 a.m., Sat., Sept. 18, for registration.)
Mon., Sept. 20	Instruction Begins
Wed., Sept. 22, 1:00 p.m.	Earliest time at which program changes may be made.
Mon., Sept. 27, 4:00 p.m.	Latest date for changes of study-lists without fee.
Fri., Oct. 1, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Nov. 5, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 12, 12:00 noon	Mid-semester grades due.
Fri., Nov. 12, 4:00 p.m.	Latest date of withdrawals for rebate of one-half fees.
Wed., Nov. 24, 6:00 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 8:00 a.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to Union, 1818) (Not a holiday)
Fri., Dec. 10, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal.
Tues., Dec. 14, 4:00 p.m.	Students withdrawing on or after this date must petition for readmissi
Wed., Dec. 22, 6:00 p.m.	Christmas Vacation begins
Mon., Jan. 3, 8:00 a.m.	Christmas Vacation ends
Fri., Jan. 14 - Sat., Jan. 22	Semester Examinations
Mon., Jan. 24, 10:00 a.m.	General Educational Development Tests, College Level, Room 300 (For all veterans who entered the Fall Semester, 1954, as beginning freshmen.)

FIRST SEMESTER REGISTRATION SCHEDULE

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 2 p.m., Saturday, September 18, 1954, will be assessed a late registration fee of $5.00.

A - Bus	Thursday, September 16	9 a.m.
But - Ez	Friday, September 17	10 a.m.
Fa - Han	Thursday, September 16	2 p.m.
Hao - Kok	Thursday, September 16	10 a.m.
Kol - Mbz	Friday, September 17	9 a.m.
Mca - Rz	Thursday, September 16	9 a.m.
S - Tao	Thursday, September 16	1 p.m.
Tap - Z	Thursday, September 16	11 a.m.

NEW STUDENTS

A - Dea	Friday, September 17	2 p.m.
Deb - Har	Saturday, September 18	9 a.m.
Has - Lee	Friday, September 17	1 p.m.
Lef - Par	Friday, September 17	3 p.m.
Pas - Sok	Saturday, September 18	10 a.m.
Sol - Z	Friday, September 17	11 a.m.

Students registering for less than 12 semester hours will register 10:30 a.m. Saturday, September 18.

LEGEND FOR SECTION LETTERS*

5, 4, and 3 hour courses

Hour	MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, and Engineering Sciences.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1954-55

First Semester (Fall, 1954)

Wed., Sept. 8 - Wed., Sept. 15	Orientation Period
Thurs., Sept. 16 - Sat., Sept. 18	Registration
Mon., Sept. 20	Instruction Begins
Wed., Nov. 24, 6 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 8 a.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818) (Not a holiday)
Wed., Dec. 22, 6 p.m.	Christmas Vacation begins
Mon., Jan. 3, 8 a.m.	Christmas Vacation ends
Fri., Jan. 14 - Sat., Jan. 22	Semester Examinations

Second Semester (Spring, 1955)

Mon., Jan. 31 - Wed., Feb. 2	Orientation Period
Thurs., Feb. 3 - Sat., Feb. 5	Registration
Mon., Feb. 7	Instruction Begins
Wed., Mar. 2	University Day (University opened, 1868) (Not a holiday)
Thurs., Apr. 7, 6 p.m.	Easter Vacation begins
Wed., Apr. 13, 8 a.m.	Easter Vacation ends
Fri., May 6	Honors Day
Mon., May 30	Memorial Day
Tues., May 31 - Wed., June 8	Semester Examinations

Summer Session - 1955

Fri., June 17 - Sat., June 18	Registration
Mon., June 20	Instruction Begins
Mon., July 4	Independence Day
Fri., Aug. 12 - Sat., Aug. 13	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1954-55

First Semester (Fall, 1954)

Tues., Sept. 7 - Fri., Sept. 10	Entrance Examinations
Mon., Sept. 13 - Sat., Sept. 18	Freshman Week and Registration
Mon., Sept. 20	Instruction Begins
Wed., Nov. 24, 1 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 1 p.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Sat., Dec. 18, 12 noon	Christmas Vacation begins
Mon., Jan. 3, 1 p.m.	Christmas Vacation ends
Fri., Jan. 21 - Sat., Jan. 29	Semester Examinations
	No Commencement Exercises

Second Semester (Spring, 1955)

Tues., Feb. 1 - Fri., Feb. 4	Entrance Examinations
Mon., Feb. 7 - Wed., Feb. 9	Registration
Thurs., Feb. 10	Instruction Begins
Wed., Mar. 2	University Day (University opened, 1868)
Thurs., Apr. 7, 1 p.m.	Easter Vacation begins
Wed., Apr. 13, 1 p.m.	Easter Vacation ends
Fri., Apr. 29	Honors Day (Classes dismissed at noon)
Mon., May 30	Memorial Day
Thurs., June 2 - Fri., June 10	Semester Examinations
Sun., June 19	Commencement Exercises

Summer Session - 1955

Tues., June 7 - Fri., June 10	Entrance Examinations
Fri., June 17 - Sat., June 18	Registration
Mon., June 20	Instruction Begins
Mon., July 4	Independence Day
Fri., Aug. 12 - Sat., Aug. 13	Summer Session Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Students who present one unit of bookkeeping for entrance should register in Accy. 102. They will not be allowed full credit in Accy. 101 unless high school bookkeeping credit can be dropped. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	24	Schneider
	C1	10	MWF	25	Fox
	D1	11	MWF	17	Graff
[1]Students with 95	D2	11	MWF	16	
or more credit hours	E1	12	MWF	17	Graff
receive only 2 hours	F1	1	MWF	24	Fox
credit.	F2	1	MWF	18	
	G1	2	MWF	24	Fox
	H1	3	MWF	24	Kabbes
	J1	4	MWF	24	Kabbes
	N1	10	MTT	18	Eggebrecht
	P1	11	MTT	18	Ross
	Q1	12	MTT	22	Schneider
	S1	2	MTT	23	Schneider
	T1	3	MTT	20	Graff
	U1	4	MTT	19	

Accy. 102. PRINCIPLES OF ACCOUNTING:- Similar to Accy. 101. Students who have one unit entrance credit in bookkeeping should take this course rather than Accy. 101. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

2 hours[1]	M1	9	TT	18	Eggebrecht
	Q1	12	TT	18	Ross
	T1	3	TT	19	

[1]Students with 95 or more credit hours will receive only 1 hour credit.

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101 or 102. Prerequisite: Accy. 101 or 102.

3 hours[1]	B1	9	MWF	18	Eggebrecht
	F1	1	MWF	19	Eggebrecht
	J1	4	MWF	23	Yankow
[1]Students with 95	M1	9	MTT	21	Yankow
or more credit hours	Q1	12	MTT	21	Yankow
receive only 2 hours credit.					

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing, credit or registration in Econ. 102 or Econ. 108.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	24	Kabbes
	E1	12	MWF	24	Kabbes
	F1	1	MWF	17	Ross
	G1	2	MWF	17	Ross
	U1	4	MTT	20	Graff

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: Sophomore Standing; Accy. 105.

3 hours	D1	11	MWF	22	Schneider
	F1	1	MWF	21	Yankow

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	1	W	251	Walley
	Lab. A	10-12	MWF	242	Walley
	Lab. B	2-4	MWF	242	Walley

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. G	3	MF	251	DeFilipps

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G.E. 108.

3 hours	Lec.	2	W	251	Rathbun
	Lab. A	2-5	TT	241	Rathbun
		3-5	W	241	Rathbun
	Lab. B	9-12	MF	241	Rathbun
		10-12	W	241	Rathbun
	Lab. C	9-12	MF	242	White
		10-12	W	242	White

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

Arch. 132. ARCHITECTURAL DESIGN:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	10	W	251	DeFilipps
	Lab. A	2-5	TT	241	DeFilipps
		2-4	W		

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	2-5	TWT	241	White

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	Lab. H	2	MF	251	Mikolajczyk

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lab. G	12	TT	251	Mikolajczyk

ART

Art 111. SURVEY OF ART HISTORY:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	Sec. A	11	MWF	251	Radice

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Sec. A	9	MWF	251	Radice
	Sec. B	4	MWF	251	McNee

Art 181. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture.

2 hours	Sec. A	8-11	TT	83	Burr
	Sec. B	8-11	MF	83	McNee
	Sec. C	2-5	TT	83	Burr
	Sec. D	2-5	MF	83	Shopen
	Sec. E	8-11	TT	84	McNee

Art 182. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 181.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Sec. A	8-11	TT	91	J. Richardson
	Sec. B	2-5	TT	91	Shopen

Art 183. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 182.

2 hours	Sec. A	8-11	MF	91	Shopen
	Sec. B	2-5	TT	84	J. Richardson
	Sec. C	3-6	MF	84	Burr

Art 184. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 183.

2 hours	Sec. A	8-11	MF	84	J. Richardson

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz. Students registering in lecture B1 may take laboratory sections 1 through 6 only. Students registering in lecture M1 may take laboratory sections 7 through 12 only. Students registering in lecture F1 may take laboratory sections 13 through 19 only. Students registering in lecture Q1 may take laboratory sections 20 through 26 only.

4 hours[1]	Lec. B1	9	WF	210	Glassman
	Lab. 1	12-2	WF	43	McMillan
	Quiz 1	12	M	43	McMillan
	Lab. 2	2-4	WF	43	Pickett
	Quiz 2	2	M	43	Pickett
	Lab. 3	2-4	TT	43	McQuate
	Quiz 3	3	M	43	McQuate
	Lab. 4	4-6	WF	43	McMillan
	Quiz 4	4	M	43	McMillan
	Lab. 5	11-1	TT	44	McQuate
	Quiz 5	12	M	44	McQuate
	Lab. 6	12-2	WF	44	McQuate
	Quiz 6	1	M	44	McQuate
	Lec. F1	1	WF	210	Little
	Lab. 13	8-10	TT	48	Rouffa
	Quiz 13	8	M	48	Rouffa
	Lab. 14	8-10	WF	46	Spirakis
	Quiz 14	9	M	46	Spirakis

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 15	8-10	TT	46	Madison
	Quiz 15	8	M	46	Madison
	Lab. 16	10-12	WF	46	Spirakis
	Quiz 16	11	M	46	Spirakis
	Lab. 17	4-6	TT	46	Little
	Quiz 17	4	M	46	Little
	Lab. 18	4-6	WF	46	Little
	Quiz 18	1	M	43	Little
	Lab. 19	10-12	WF	48	Madison
	Quiz 19	11	M	48	Madison
	Lec. M1	9	TT	210	Glassman
	Lab. 7	4-6	TT	44	Presley
	Quiz 7	4	F	44	Presley
	Lab. 8	11-1	TT	46	
	Quiz 8	12	M	46	
	Lab. 9	12-2	WF	46	Hered
	Quiz 9	1	M	46	Hered
	Lab. 10	2-4	TT	46	Little
	Quiz 10	3	M	46	Little
	Lab. 11	12-2	WF	48	Glassman
	Quiz 11	1	M	48	Glassman
	Lab. 12	2-4	TT	48	Hered
	Quiz 12	2	M	48	Hered
	Lec. Q1	12	TT	210	Pickett
	Lab. 20	8-10	WF	44	McQuate
	Quiz 20	8	M	44	McQuate
	Lab. 21	4-6	MW	44	Presley
	Quiz 21	12	M	48	Presley
	Lab. 22	2-4	WF	46	Presley
	Quiz 22	2	M	46	Presley
	Lab. 23	8-10	TT	45	McMillan
	Quiz 23	8	M	45	McMillan
	Lab. 24	10-12	WF	45	Hered
	Quiz 24	10	M	45	Hered
	Lab. 25	8-10	WF	48	
	Quiz 25	9	M	48	
	Lab. 26	4-6	TT	48	Hered
	Quiz 26	4	M	48	Hered

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Biology 111. GENERAL BOTANY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. E1	12	WF	210	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
	Quiz 1	10	M	48	Rouffa
[1]Students with 95	Lab. 2	2-4	WF	48	Rouffa
or more credit hours	Quiz 2	3	M	48	Rouffa
receive only 3 hours credit.					

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. N1	10	TT	218	Madison
	Lab. 1	8-10	WF	43	Madison
	Quiz 1	9	M	43	Madison
[1]Students with 95	Lab. 2	10-12	WF	43	McMillan
or more credit hours	Quiz 2	10	M	43	McMillan
receive only 3 hours credit.					

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. P1	11	TT	210	Hopkins
	Lab. 1	8-10	TT	44	Hopkins
	Quiz 1	9	M	44	Hopkins
[1]Students with 95	Lab. 2	10-12	WF	44	Hopkins
or more credit hours	Quiz 2	11	M	44	Hopkins
receive only 3 hours	Lab. 3	2-4	WF	44	Shank
credit.	Quiz 3	2	M	44	Shank
	Lab. 4	2-4	TT	44	Presley
	Quiz 4	3	M	44	Presley

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. D1	11	MWF	210	Shank

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 1	10-1	TT	45	Grubgeld
	Lab. 2	2-4	MWF	45	Grubgeld
	Lab. 3	4-6	MWF	45	Grubgeld

Biology 141. VERTEBRATE PHYSIOLOGY:- This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. S1	2	TT	218	Sangster
	Lab. 1	8-10	TT	43	Spirakis
	Quiz 1	10	Th	43	Spirakis
	Lab. 2	11-1	TT	43	Spirakis
	Quiz 2	10	Tu	43	Spirakis

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. C1	10	MWF	210	Sangster
	Lab. 1	12-2	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	B1	9	MWF	25	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

5 hours[1]	Lec. C	10	WF	204	Bachrach

[1]Students who have received entrance credit for high school chemistry

Chem. 101. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
are given only 3	Lab. 1	8-10	MWF	53	
hours credit for	Quiz 1	9	TT	80	
Chem. 101. Stud-	Lab. 2	10-12	MTT	53	Bachrach
dents with 95 or	Quiz 2	11	WF	80	Bachrach
more credit hours	Lab. 3	8-11	TT	53	Seabright
receive only 3	Quiz 3	9	MW	76	Seabright
hours credit.	Lab. 4	12-2	MWF	53	Cowin
	Quiz 4	12	TT	76	Cowin
NOT OPEN TO STUDENTS	Lab. 5	1-3	MWF	53	
IN THE COLLEGE OF	Quiz 5	2	TT	74	
ENGINEERING	Lab. 6	2-4	MWF	53	Bachrach-Harris
	Quiz 6	3	TT	76	Bachrach
	Lab. 7	2-5	TT	53	Ullman
	Quiz 7	10	TT	75	Ullman

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

3 hours[1]	*Lec. B	9	WF	204	Schrage
	Lab. 11	8-10	M	53	
	Quiz 11	9	TT	76	
[1]Students below the	Lab. 12	10-12	M	53	Schrage
rank of senior re-	Quiz 12	11	TT	76	Schrage
ceive 5 hours	Lab. 13	12-2	M	53	
credit provided	Quiz 13	1	WF	75	
their high school	Lab. 14	2-4	M	53	Mansfield
chemistry has not	Quiz 14	3	WF	74	Mansfield
been used for en-	Lab. 15	9-11	W	53	Cowin
trance and their	Quiz 15	9	TT	75	Cowin
final grade in	Lab. 16	11-1	Th	53	Questiaux
Chem. 102 is "C" or	Quiz 16	11	TuF	75	Questiaux
above. Students					
with 95 or more	**Lec. M	9	TT	204	Schrage
credit hours receive	Lab. 21	8-10	M	50	
only 2 hours credit.	Quiz 21	9	WF	75	
	Lab. 22	10-12	Th	50	
*NOT OPEN TO STUDENTS	Quiz 22	11	Tu	74	
IN THE COLLEGE OF		11	F	76	
ENGINEERING	Lab. 23	11-1	F	50	
	Quiz 23	12	TT	74	
**FOR STUDENTS IN THE	Lab. 24	2-4	Tu	50	Schrage
COLLEGE OF ENGINEER-	Quiz 24	3	MW	75	Schrage
ING ONLY					

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics 111 or 112.

Chem. 103. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. H	3	WF	204	Hunt
	Lec. P	11	TT	204	Hunt
	Lab. 26	11-1	TT	50	
[1]Students who have	Quiz 26	12	MW	75	
used their high	Lab. 27	10-12	WF	50	Rennagel
school chemistry	Quiz 27	10	TT	74	Rennagel
for entrance credit	Lab. 28	10-12	MW	50	Harris
are given only 3	Quiz 28	12	WF	80	Harris
hours credit for Chem.	Lab. 29	1-3	WF	50	
103. Students with	Quiz 29	3	TT	75	
95 or more credit	Lab. 30	12-2	MW	50	Seabright
hours receive only	Quiz 30	12	TT	75	Seabright
3 hours credit.	Lab. 31	11-1	WF	50	Hunt
	Quiz 31	1	MW	74	Hunt
	Lab. 32	2-4	TT	50	Seabright
	Quiz 32	2	MW	74	Seabright
	Lab. 33	2-4	TT	50	Rennagel
	Quiz 33	2	MW	75	Rennagel
	Lab. 34	3-5	MF	50	Hunt-Rennagel
	Quiz 34	3	TT	80	Hunt
	Lab. 35	4-6	MW	50	Rennagel
	Quiz 35	4	TT	75	Rennagel
	Lab. 36	9-11	WF	50	Ullman
	Quiz 36	11	WF	74	Ullman
	Lab. 37	1-3	MW	50	Ullman
	Quiz 37	4	MW	76	Ullman
	Lab. 38	8-10	TT	50	
	Quiz 38	11	MW	75	

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chemistry 101, 102, or 103.

4 hours[1]	Lec. D	11	WF	204	Huitema
	Lab. 41	8-10	MW	50	Sackheim
	Quiz 41	8	TT	75	Sackheim
[1]Credit in Chem. 104	Lab. 42	10-12	TT	50	Sackheim
will not be granted	Quiz 42	10	WF	75	Sackheim
to students who have	Lab. 43	12-2	MW	50	Sackheim
received credit in	Quiz 43	12	TT	80	Sackheim
Chem. 105 or 106.	Lab. 44	2-4	MW	50	Harris
Students with 95 or	Quiz 44	2	TT	75	Harris
more credit hours	Lab. 45	3-5	TT	50	Harris
receive only 3 hours	Quiz 45	11	TT	80	Harris
credit.					

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. Prerequisite: Chemistry 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. G	2	WF	210	Stubblefield
	Lab. 51	8-10	MWF	53	Hedberg
	Quiz 51	8	TT	74	Hedberg
[1]Credit in Chem. 105 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.	Lab. 52	10-12	MWF	53	Stubblefield-Hedberg
	Quiz 52	10	TT	76	Stubblefield
	Lab. 53	12-2	MWF	53	Questiaux
	Quiz 53	2	TT	76	Questiaux
	Lab. 54	2-5	TT	53	Stubblefield
	Quiz 54	4	WF	75	Stubblefield

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. Prerequisite: Chemistry 101, 102, or 103.

5 hours[1]	Lec. N	10	TT	210	Mueller
	Lab. 61	10-12	MWF	50	Mueller-R.Miller
	Quiz 61	1	MW	80	Mueller
[1]Credit in Chem. 106 will not be granted to students who have	Lab. 62	2-5	TT	50	Mueller
	Quiz 62	3	MW	76	Mueller

received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

5 hours[1]	Lec. S	2	TT	204	Tyree
	Lab. 71	10-12	TT	53	Tyree
	Quiz 71	10	MWF	74	Tyree
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 72	3-5	TT	53	Tyree
	Quiz 72	2	MWF	76	Tyree

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- (Concluded). who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Pre-medical students requiring more than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry. Graduation from high school in the upper quarter of the high school class.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. G	2	MWF	204	Huitema
	Lab. 66	9-12	Th	50	Hedberg
	Quiz 66	1	WF	76	Hedberg
	Lab. 67	10-1	Tu	50	Hedberg
	Quiz 67	11	MW	76	Hedberg
	Lab. 68	2-5	Th	50	Huitema
	Quiz 68	4	WF	74	Huitema

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106

5 hours	Lec. E	12	MW	65	Mansfield
	Lab. 76	9-1	TT	53	Mansfield
	Quiz 76	10	WF	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. Prerequisite: Chemistry 104, 105, or 106.

5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	8-11	MWF	54	Gottlieb
	Quiz 81	10	Th	80	Gottlieb
	Lab. 82	1-4	MWF	54	Gottlieb
	Quiz 82	2	Tu	80	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in the Chemistry curriculum and Chemical Engineering. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. T	3	TT	204	Babler
	Lab. 86	8-11	MWF	54	Babler
	Quiz 86	10	Tu	80	Babler
	Lab. 87	3-6	MWF	54	
	Quiz 87	4	Th	74	

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chemistry 105 or 110.

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	
	Lab. 91	8-11	MW	52	Questiaux
	Quiz 91	9	F	76	Questiaux
	Lab. 92	9-12	TT	52	Crum
	Quiz 92	10	M	75	Crum
	Lab. 93	2-5	WF	52	Crum
	Quiz 93	2	M	80	Crum

CIVIL ENGINEERING

C. E. 103. ROUTE SURVEYING:- Prerequisite: Credit in civil engineering summer camp.

3 hours	A	9-12	MWF	63

C. E. 105. SURVEYING:- Prerequisite: G.E. 101 and Math. 123.

2 hours	Lec. A	9	Tu	63
	Lab. A	9-12	Th	63

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	F1	1	MWF	63

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

2 hours	A	2-4	TT	61 & 63

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	19	Knudson
	D1	11	MWF	21	Knudson
	F1	1	MWF	22	Williams
	H1	3	MWF	23	Berg
	N1	10	MTT	19	Berg
	Q1	12	MTT	19	Berg

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

Econ. 102. PRINCIPLES OF ECONOMICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	17	Geldard
	C1	10	MWF	24	Derrick
	E1	12	MWF	18	Geldard
	F1	1	MWF	20	Jung
	H1	3	MWF	25	Grampp
	J1	4	MWF	25	Grampp
	N1	10	MTT	16	
	S1	2	MTT	20	Jung

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	B1	9	MWF	20	O. Miller
	C1	10	MWF	20	O. Miller
	G1	2	MWF	25	Dunne

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	D1	11	MWF	25	Grampp
	F1	1	MWF	25	Grampp
	G1	2	MWF	18	Larson
	P1	11	MTT	20	Larson
	Q1	12	MTT	20	Larson

Econ. 136. ECONOMIC HISTORY OF THE UNITED STATES:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. For freshmen only.

3 hours	B1	9	MWF	23	Gillett
	C1	10	MWF	21	J. Morris
	D1	11	MWF	23	Jung
	E1	12	MWF	25	J. Morris
	E2	12	MWF	23	Gillett
	F1	1	MWF	16	
	G1	2	MWF	22	O. Miller
	G2	2	MWF	16	
	H1	3	MWF	22	O. Miller
	J1	4	MWF	21	J. Morris
	M1	9	MTT	22	Williams
	M2	9	MTT	16	
	N1	10	MTT	22	Williams
	S1	2	MTT	21	Knudson
	T1	3	MTT	21	Knudson
	U1	4	MTT	22	Jung

Econ. 138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	17	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108; sophomore standing in Commerce.

3 hours	B1	9	MW	33	Dunne
	Prac. I	9-11	F	33	Dunne
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	S1	2	TT	28	Ricks
	T1	3	TT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture and architectural engineering students only.

3 hours	D1	11	MWF	123	Klapperich

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Credit or registration in Physics 107 and Math. 143.

4 hours	B1	9	MWF	123	Klapperich
	Lab. P	8-11	Th	120	

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	C1	10	MWF	223	F. Johnson
	E1	12	MWF	229	I. Miller
	F1	1	MWF	205	Brown
[1]Students with 95 or more credit hours receive only 2 hours credit.	G1	2	MWF	229	J. Johnson
	P1	11	MTT	205	Jackman

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. See note under Engl. 101.

3 hours[1]	B1	9	MWF	229	Niederman
	C1	10	MWF	229	Love
	F1	1	MWF	212	Matlaw
[1]Students with 95 or more credit hours receive only 2 hours credit.	H1	3	MWF	229	Waller
	Q1	12	MTT	212	Leonhard

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoyevsky's CRIME AND PUNISHMENT, E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101.

3 hours[1]	E1	12	MWF	211	Karanikas
	F1	1	MWF	227	Wright
	G1	2	MWF	227	Kerwick
[1]Students with 95 or more credit hours receive only 2 hours credit.	H1	3	MWF	227	Kogan
	M1	9	MTT	227	Atwood
	S1	2	MTT	212	Gallagher

Engl. 113. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers. From 1620 to the Civil War. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

Engl. 113. AMERICAN LITERATURE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	209	Lease
	G1	2	MWF	224	Willett
	M1	9	MTT	212	Lease

Engl. 114. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers. From the Civil War to the present. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

3 hours	B1	9	MWF	211	Stronks
	D1	11	MWF	229	Crumley

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, and RASSELAS. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	D1	11	MWF	211	Blum
	N1	10	MTT	212	S. Miller

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	D1	11	MWF	209	Wright
	P1	11	MTT	214	Kogan

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	C1	10	MWF	224	Vest
	P1	11	MTT	203	Nicholas

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. No credit for graduation is given for French 101 without French 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	224	Skogen
	B1	9	TWTF	226	Lenihan
	C1	10	TWTF	226	Lenihan
[1]Students with 95	D1	11	TWTF	224	Skogen
or more credit hours	E1	12	TWTF	224	Skogen
receive only 3 hours	E2	12	TWTF	226	Cowles
credit.	G1	2	TWTF	226	Cowles
	H1	3	TWTF	224	Lein
	J1	4	TWTF	224	Lein
	J2	4	TWTF	226	Cowles

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	B1	9	TWTF	224	Skogen
	H1	3	TWTF	226	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102, or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	228	Lein
	G1	2	TWTF	228	Lein

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135

G. E. 101. ELEMENTS OF DRAWING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	A2	8-10	MWF	136	
	A4	8-10	MWF	141	
	B1	10-12	MWF	135	
	B3	10-12	MWF	137	
	B4	10-12	MWF	141	
	C1	12-2	MWF	135	
	C3	12-2	MWF	137	
	C4	12-2	MWF	141	
	D1	2-4	MWF	135	
	D3	2-4	MWF	137	
	D4	2-4	MWF	141	
	E2	4-6	MWF	136	
	E3	4-6	MWF	137	
	E4	4-6	MWF	141	
	F1	8-11	TT	135	
	F2	8-11	TT	136	
	F3	8-11	TT	137	
	G1	2-5	TT	135	
	G2	2-5	TT	136	
	G3	2-5	TT	137	

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane and solid geometry.

3 hours	A5	8-10	MWF	143	
	B5	10-12	MWF	143	
	C5	12-2	MWF	143	
	D5	2-4	MWF	143	
	F5	8-11	TT	143	
	G5	2-5	TT	143	

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145	
	F6	8-11	TT	145	
	D6	2-4	MWF	145	
	G6	2-5	TT	145	
	B6	10-12	MWF	145	

G. E. 108. ARCHITECTURAL PROJECTIONS:- Continuation of G. E. 107. Prerequisite: G. E. 107.

2 hours	A7	8-10	MWF	146	
	F7	8-11	TT	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G. E. 101; G. E. 102.

2 hours	D7	2-4	MWF	146	

G. E. 203. AIRCRAFT DRAFTING AND LOFTING:- Aircraft terminology, control, and reference surface systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting, plane, tapered and double curved surfaces, airfoils, intersections; practices and standards. Prerequisite: G. E. 101 and G. E. 102.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F4	8-11	TT	141	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical science; Geography 101 and 104 meet the general education requirement in social science, in the College of Liberal Arts and Sciences. Lectures, discussions, and quiz.

5 hours[1]	Lec. D1	11	WF	218	Cutshall
	Quiz A1	8	MWF	14	Kusch
	Quiz B1	9	MWF	13	Kusch
	Quiz F1	1	MWF	14	Cutshall
	Quiz S1	2	TT	13	Kusch
		3	Tu	13	Kusch
	Lec. M1	9	TT	218	Finney
	Quiz A2	8	MWF	13	Finney
	Quiz C1	10	MWF	13	Finney
	Quiz D1	11	MWF	14	Finney
	Quiz G1	2	MWF	14	Cutshall
	Quiz P1	11	TT	13	Finney
		12	Th	13	Finney

[1]Students with 95 or more credit hours receive only 4 hours credit.

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geography 101 or consent of instructor.

3 hours[1]	Q1	12	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MW	14	Cutshall
		9	F	16	Cutshall

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geography 101, or consent of instructor.

3 hours	D1	11	MWF	13	Kusch
	F1	1	MWF	13	Kusch

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

4 hours[1]	Lec. S	2	TT	210	Kurs
	Lab. 1	8-10	Tu	42	Krinsley
	Lab. 2	10-12	Th	42	Kurs
[1]Students with 95	Lab. 3	2-4	M	42	Kurs
or more credit hours	Lab. 4	2-4	W	42	Koucky
receive only 3 hours	Lab. 5	3-5	Tu	42	Koucky
credit.	Lab. 6	3-5	Th	42	Koucky
	Quiz C	10	F	42	Koucky
	Quiz E1	12	M	42	Koucky
	Quiz E2	12	W	42	Koucky
	Quiz E3	12	F	42	Koucky
	Quiz G	2	F	42	Koucky
	Quiz H	3	F	42	Kurs

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 111.

4 hours[1]	Lec. D	11	WF	65	Krinsley
	Lab. 11	8-10	Th	42	Krinsley
	Lab. 12	10-12	Tu	42	Krinsley
[1]Students with 95	Quiz C	10	M	42	Krinsley
or more credit hours	Quiz Q	12	Th	42	Krinsley
receive only 3 hours credit.					

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: One semester of college chemistry.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lab. Discussion	8-10	MWF	42-53	Koucky

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	D	11	MWF	42	Kurs
	Quiz-Discussion				
	F	1	MWF	42	Kurs
	Quiz-Discussion				

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. No credit toward graduation is given for German 101 without German 102.

4 hours[1]	A1	8	TWTF	220	Willner
	A2	8	TWTF	221	Teichmann
	B1	9	TWTF	220	Willner
	B2	9	TWTF	221	Vardaman
	C1	10	TWTF	220	Vardaman
	D1	11	TWTF	220	Teichmann
	D2	11	TWTF	221	Braunfeld
	E1	12	TWTF	220	Kauf
	E2	12	TWTF	215	Fuller
	G1	2	TWTF	220	Hartoch
	G2	2	TWTF	221	Braunfeld
	H1	3	TWTF	220	Fuller
	J1	4	TWTF	220	Hartoch
	J2	4	TWTF	221	Kauf

[1]Students with 95 or more credit hours receive only 3 hours credit.

German 102. ELEMENTARY COURSE:- Continuation of German 101. Prerequisite: German 101, or one year of high school German.

4 hours[1]	C1	10	TWTF	221	Willner
	E1	12	TWTF	221	Teichmann
	H1	3	TWTF	221	Kauf

[1]Students with 95 or more credit hours receive only 3 hours credit.

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

German 103. INTERMEDIATE COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	B1	9	TWTF	222	Braunfeld
	C1	10	TWTF	222	Braunfeld
	D1	11	TWTF	222	Fuller
	E1	12	TWTF	222	Hartoch
	G1	2	TWTF	222	Fuller
	H1	3	TWTF	222	Hartoch

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Teichmann
	E1	12	TWTF	223	Willner
	G1	2	TWTF	223	Kauf

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102, or two years of high school German; concurrent registration in German 103 or 104.

2 hours	F1	1	WF	223	Vardaman

HISTORY

Hist. 111. MODERN EUROPEAN HISTORY FROM THE RENAISSANCE TO 1815:- Europe from the age of the great discoveries to the close of the Napoleonic wars.

4 hours[1]	Lec. Q1	12	TT	218	Unfer
	Quiz F1	1	MW	96	Unfer
	Quiz G1	2	MW	97	Unfer
[1]Students with 95	Quiz J1	4	MW	97	Unfer
or more credit hours	Quiz S1	2	TT	18	Unfer
receive only 3 hours	Quiz T1	3	TT	18	Unfer
credit.					
	Lec. E1	12	WF	218	Nicholson
	Quiz C1	10	WF	22	Nicholson
	Quiz N1	10	TT	25	Nicholson
	Quiz Q1	12	TT	25	Nicholson

Hist. 131. HISTORY OF ENGLAND TO 1688:- History of the British people to 1688.

Hist. 131. HISTORY OF ENGLAND TO 1688:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	N1	10	TTF	82	Bill
	Q1	12	MTT	82	Bill

[1]Students with 95 or more credit hours receive only 2 hours credit.

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundations, the movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	S. Jones
	Quiz E1	12	MW	13	S. Jones
	Quiz M1	9	TT	24	S. Jones
	Quiz N1	10	TT	24	S. Jones
	Quiz Q1	12	TT	24	S. Jones

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

3 hours	S1	2	TT	16	Nicholson
		3	Th	16	Nicholson

Hist. 152. HISTORY OF THE UNITED STATES, 1865-1954:- A century of national life and organization. Prerequisite: Sophomore standing.

3 hours	N1	10	MTT	94	Riddle

HUMANITIES

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course plus Humanities 102 satisfies the general education requirement in the humanities.

4 hours[1]	S1	2	TT	227	Lease

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- (Concluded). course plus Humanities 152 satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	223	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

2 hours[1]	(For Women)				
	A	8	WF	213	Kostka
	T	3	TT	213	Schuckmell
[1]Students with 95 or more credit hours receive only 1 hour credit.	U	4	TT	213	Schuckmell
	(For Men)				
	L	8	TT	213	Wallk
	M	9	TT	213	Wallk
	B	9	MW	213	O'Neil
	C	10	MW	213	O'Neil
	F	1	MW	213	Staff
	G	2	MW	213	Staff
	H	3	WF	213	Staff
	J	4	WF	213	Staff

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	E	12	WF	213	Kostka
[1]Students with 95 or more credit hours receive only 1 hour credit.	(For Men)				
	D	11	WF	213	Grisamore
	Q	12	TT	213	Grisamore
	S	2	TT	213	Grisamore

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	P	11	TT	Gym	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	C1	10	MWF	23	Gillett
	F1	1	MWF	23	Gillett
	G1	2	MWF	19	Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	D1	11	MWF	19	Berg
	H1	3	MWF	18	Larson

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- Continuation of Mathematics 101. Prerequisite: Mathematics 101.

3 hours	F1	1	MWF	100	C. Olsen

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	100	Ockert
	A2	8	MTWTF	103	
	B1	9	MTWTF	102	Johannes
	B2	9	MTWTF	103	Hornacek

[1]Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B3	9	MTWTF	104	Ondrak
	B4	9	MWF	100	C. Olsen
	C1	10	MTWTF	102	Gordon
	C2	10	MTWTF	103	Ondrak
	C3	10	MTWTF	104	Curtiss
	C4	10	MWF	100	Hornacek
	D1	11	MTWTF	102	Dinkines
	D2	11	MTWTF	103	
	D3	11	MWF	100	Lariviere
	E1	12	MTWTF	102	Nolan
	E2	12	MTWTF	103	C. Olsen
	E3	12	MTWTF	104	Murphy
	E4	12	MWF	134	Pennisi
	F1	1	MWF	102	Berglund
	F2	1	MWF	103	Scholomiti
	G1	2	MTWTF	102	Ragland
	G2	2	MTWTF	103	Alberti
	G3	2	MTWTF	104	Schmitz
	H1	3	MTWTF	102	Hill
	H2	3	MTWTF	103	Grenard
	H3	3	MTWTF	123	Stelling
	H4	3	MWF	100	Scholomiti
	J1	4	MTWTF	102	Stelling
	J2	4	MTWTF	103	Engert
	J3	4	MTWTF	104	Schmitz
	J4	4	MWF	100	
	M1	9	M	101	Ockert
			TT	100	
	S1	2	M	110	
			TT	97	

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	E1	12	MWF	105	Lariviere
	F1	1	MWF	101	Alberti
	H1	3	MWF	101	Turner
	P1	11	M	101	Scholomiti
	S1	2	M	101	Lariviere
	U1	4	M	101	Scholomiti
			TT	100	

[1] Satisfies deficiency in solid geometry for engineering students; all other students receive full credit.

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
No credit	C1	10	MWF	105	Ockert
	F1	1	MWF	104	Schmitz

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

4 hours	D1	11	TWTF	101	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

3 hours[1]	A1	8	MWF	101	Gordon
	B1	9	MWF	106	Nolan
	D1	11	MWF	105	Ragland
[1]Students with 95 or more credit hours receive only 2 hours credit.	F1	1	MWF	105	
	*F2	1	MWF	111	Ockert
	G1	2	MWF	105	Engert
	G2	2	MWF	106	Hill
	*G3	2	MWF	100	Stelling
*For Commerce students only.	H1	3	MWF	104	Lariviere
	*H2	3	MWF	105	Ragland
	J1	4	MWF	105	Grenard
	*M1	9	M	80	
			TT	105	
	N1	10	M	80	Feinstein
			TT	100	
	Q1	12	M	101	Berglund
			TT	100	
	U1	4	MTT	106	Lariviere

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

2 hours[1]	L1	8	TT	101	Gordon
	M1	9	TT	106	C. Olsen
	N1	10	TT	106	C. Olsen
[1]Students with 95 or more credit hours receive only 1 hour credit.	N2	10	TT	105	Hornacek
	P1	11	TT	105	Ragland
	Q1	12	TT	105	Stelling
	Q2	12	TT	111	Ondrak
	S1	2	TT	105	Engert
	S2	2	TT	106	Nolan
	T1	3	TT	104	Ragland

Math. 114. PLANE TRIGONOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	T2	3	TT	105	Murphy
	T3	3	TT	101	Schmitz
	U1	4	TT	105	Grenard
	U2	4	TT	101	Alberti

Math. 117. COMBINED FRESHMAN MATHEMATICS:- A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

5 hours	C1	10	MTWTF	111	Nolan
	D1	11	MTWTF	111	Turner
	H1	3	MTWTF	111	Engert
	J1	4	MTWTF	111	Hill

Math. 122. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, and 114 or 115.

4 hours[1]	B1	9	TWTF	101	Berglund
	G1	2	TWTF	110	Pennisi

[1]Students with 95 or more credit hours receive only 3 hours credit.

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, 114 or 115.

5 hours[1]	A1	8	MTWTF	102	Hornacek
	B1	9	MTWTF	111	Curtiss
	C1	10	MTWTF	110	Frank
	C2	10	MTWTF	101	Johannes
	D1	11	MTWTF	110	Feinstein
	E1	12	MTWTF	110	Grenard
	H1	3	MTWTF	110	Alberti
	J1	4	MTWTF	110	Murphy

[1]Students with 95 or more credit hours receive only 4 hours credit.

Math. 127. COMBINED FRESHMAN MATHEMATICS:- Continuation of Mathematics 117. Prerequisite: Mathematics 117.

4 hours	E1	12	TWTF	101	Frank
	G1	2	TWTF	101	Turner

Math. 132. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122.

5 hours	E1	9	MTWTF	110	Gordon

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122 or 123.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	105	Scholomiti
	C1	10	MWF	106	Hartley
	E1	12	MWF	100	Curtiss
	F1	1	MWF	110	Turner
	G1	2	MWF	113	Feinstein
	P1	11	M	80	Frank

Math. 137. CALCULUS:- For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Mathematics 117 and 127, or consent of department.

3 hours	E1	12	MWF	111	Ondrak

Math. 142. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 132.

3 hours	F1	1	MWF	106	Murphy

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 133.

5 hours	D1	11	MTWTF	106	Berglund
	E1	12	MTWTF	106	Johannes
	G1	2	MTWTF	111	Dinkines
	H1	3	MTWTF	106	Pennisi

Math. 147. CALCULUS:- Continuation of Mathematics 137. Prerequisite: Mathematics 137.

3 hours	D1	11	MWF	104	Hill

Math. 341. DIFFERENTIAL EQUATIONS:- Prerequisite: Mathematics 132 and 142, or 137 and 147.

3 hours	E1	12	MWF	144	Dinkines

MECHANICAL ENGINEERING

M. E. 171. MECHANISM:- Prerequisite: G. E. 101 and registration or credit in Physics 103 or Physics 106.

2 hours	B2	10-12	WF	136
	C2	12-2	WF	136

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B	9	MWF	65	

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. A	10	MF	65
	Lec. B	1	MF	65
	Lab. A	8-11	Tu	63 & 71
	Lab. B	8-11	Th	63 & 71
	Lab. C	2-5	Tu	63 & 71

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. A	11	TT	65
	Lec. B	3	MF	65
	Lab. A	8-11	Tu	64
	Lab. B	2-5	Th	64

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 104 or 108, and Math. 142 or 143.

3 hours	F1	1	MW	123
		1-3	F	123

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- Military organization; military policy of the United States; evolution of warfare; weapons; leadership, drill and exercise of command. Students must register in the two hour theory course and in one drill period. Prerequisite: Approval of the Military Science department.

1 hour	Theory 1X	9	MW	230	Severns
	Theory 2X	9	TT	230	O'Neill
	Theory 3X	10	MW	230	Severns
	Theory 4X	10	TT	230	O'Neill
	Theory 5X	2	MW	230	Severns
	Theory 6X	2	TT	230	O'Neill
	Drill	9, 10, 11, F 1, 2, 3		Drill area	

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- Military organization; weapons; scouting and patrolling; explosives and demolitons; leadership, drill and exercise of command. Students must register in the

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- (Concluded). two hour theory course and in one drill period. Prerequisite: MS 101 and MS 102 or approval of the Military Science department.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	116	DeRoche
	Theory 2X	9	TT	116	DeRoche
	Theory 3X	2	MW	116	DeRoche
	Theory 4X	2	TT	116	DeRoche
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

Mil. Sci. 205. ADVANCED INFANTRY:- Organization; weapons; gunnery with Infantry weapons; leadership, drill and exercise of command. Students must register in four hour theory course and in one drill period. Prerequisite: MS 103 and MS 104; successful completion of Armed Forces Qualification Tests; Officer type physical examination; and approval of Military Science department.

3 hours	Theory X	12	MTWT	230	McNulty
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

Mil. Sci. 235. ADVANCED CORPS OF ENGINEERS:- Organization of engineer units; battalion staff procedures; engineer signal communication; advanced map reading; military bridging; leadership, drill and exercise of command. Students must register in four hour theory course and in one drill period. Prerequisite: MS 103 and MS 104; enrollment in engineering or allied curriculum; successful completion of Armed Forced Qualification Tests; Officer type physical examination and approval of Military Science department.

3 hours	Theory X	11	MTWT	230	Rollins
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

MUSIC

University Band:- The study and performance of a variety of band literature with public appearances in the form of concerts, convocations, and selected University functions. Band instruments of most kinds are available for free use by students. Admission by consent of director.

No credit	*1	TT	354	Zahrt

*Rehearsals continue for part or all of the two o'clock hour for those who are able to arrange their schedules to permit this, but while attendance during the two o'clock period is desired, it is not required.

University Choir:- Rehearsal and public performances of standard choral works; training in sight singing. Admission by consent of director.

Credit	Section	Hours	Days	Room	Instructor
No credit	D1	11	MTT	354	Williams

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	96	Page
	H1	3	MWF	96	D. Morris
	Q1	12	MTT	96	Page
	S1	2	MTT	96	Page

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	D1	11	MWF	97	Page
	E1	12	MWF	16	D. Morris
	G1	2	MWF	13	D. Morris
	P1	11	TT	16	D. Morris
		12	Th	16	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

2 hours	P1	11	TT	96	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for the second, third, or fourth time should register for P.E.M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Strnad
	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	Rader
	F	1	MWF	Gym	Fordham

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hours	A	8	MWF	Gym	Kristufek

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B	9	MWF	Gym	Keyser
	C	10	MWF	Gym	Montcalm
	D1	11	MWF	Gym	Strnad
	D2	11	MWF	Gym	Frey
	E1	12	MWF	Gym	Versen
	E2	12	MWF	Gym	Mann
	F	1	MWF	Gym	L. Miller
	G	2	MWF	Gym	Rader
	H	3	MWF	Gym	L. Miller

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	C	10	MWF	Gym	Keyser
	D	11	MWF	Gym	Montcalm
	F	1	MWF	Gym	Frey
*Classes will meet for	G	2	MWF	Gym	Bedard
1½ hours.	MN	*9	TT	Gym	Montcalm
	NP	*10	TT	Gym	Frey
	QR	*12	TT	Gym	Kreidler

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	E	12	MWF	Gym	Kreidler
	PQ	*11	TT	Gym	Montcalm

*Classes will meet for 1½ hours.

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Kreidler
	D	11	MWF	Gym	Keyser
	E	12	MWF	Gym	Montcalm
*Classes will meet for	F	1	MWF	Gym	Montcalm
1½ hours.	G	2	MWF	Gym	Frey
	H	3	MWF	Gym	Bedard
	PQ	*11	TT	Gym	Bedard
	QR	*12	TT	Gym	Bedard

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Kristufek
	D	11	MWF	Gym	Berrafato
	E	12	MWF	Gym	Strnad
*Classes will meet for	F	1	MWF	Gym	Strnad
1½ hours.	G	2	MWF	Gym	Berrafato
	NP	*10	TT	Gym	Strnad
	QR	*12	TT	Gym	Kristufek
	ST	*2	TT	Gym	Kristufek

P. E. M. 118. WRESTLING:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	8	MWF	Gym	Mann
	B	9	MWF	Gym	Mann
	C	10	MWF	Gym	Mann
*Classes will meet for	D	11	MWF	Gym	Kristufek
1½ hours.	E	12	MWF	Gym	Ryan
	F	1	MWF	Gym	Ryan
	G	2	MWF	Gym	Ryan
	H	3	MWF	Gym	Berrafato
	LM	*8	TT	Gym	Ryan
	ST	*2	TT	Gym	Mann

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-

1 hour	H	3	MWF	Gym	Ryan
	MN	*9	TT	Gym	Strnad
	PQ	*11	TT	Gym	Kreidler

*Classes will meet for 1½ hours.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	A	8	MWF	Gym	Kreidler
	B	9	MWF	Gym	Kreidler
	C	10	MWF	Gym	Versen
*Classes will meet for	D	11	MWF	Gym	Versen
1½ hours.	E	12	MWF	Gym	Bedard
	EF	**12:40	MWF	Gym	L. Miller
	F	1	MWF	Gym	Bedard
**Class will start at	G	2	MWF	Gym	L. Miller
12:40 and end at 1:10.	H	3	MWF	Gym	Rader
	PQ	*11	TT	Gym	Frey
	QR	*12	TT	Gym	Berrafato

P. E. M. 129. VOLLEYBALL:-

1 hour	A	***8	MWF	Gym	Keyser
	B	***9	MWF	Gym	Kristufek
	LM	*8	TT	Gym	Strnad
*Classes will meet for	MN	*9	TT	Gym	Ryan
1½ hours.	NP	*10	TT	Gym	Versen
	PQ	*11	TT	Gym	Kristufek
	QR	*12	TT	Gym	Mann
***Adaptive ONLY.	ST	*2	TT	Gym	Berrafato

P. E. M. 130. BASKETBALL:-

1 hour	DE	**11	MWF	Gym	Rader
	H	3	MWF	Gym	Gedvilas

**Class will start at 11:40 and end at 12:10.

P. E. M. 132. ARCHERY:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	NP	*10	TT	Gym	Rader
	ST	*2	TT	Gym	Rader

*Classes will meet for 1½ hours.

P. E. M. 136. BADMINTON:-

1 hour	LM	*8	TT	Gym	Montcalm
	MN	*9	TT	Gym	Bedard
	NP	*10	TT	Gym	Fordham
	PQ	*11	TT	Gym	Ryan
	QR	*12	TT	Gym	Versen
	ST	*2	TT	Gym	L. Miller

P. E. M. 139. BACKYARD SPORTS:-

1 hour	C	10	MWF	Gym	Berrafato
	F	1	MWF	Gym	Berrafato

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

1 hour	NP	*10	TT	Gym	Kreidler
	PQ	*11	TT	Gym	Gedvilas
	QR	*12	TT	Gym	Rader

*Classes will meet for 1½ hours.

P. E. M. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in physical education.

2 hours	D	11	MWF		Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Gedvilas

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in physical education. (First eight weeks)

Credit	Section	Hours	Days	Room	Instructor
2 hours	A	8-10	MTWTF	Gym	Versen

P. E. M. 155. GYMNASTICS:- For students majoring in physical education. (First eight weeks)

2 hours	A	8-10	MTWTF	Gym	Frey

P. E. M. 156. TRACK AND FIELD:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Fordham

Rec. 174. CAMP COUNSELING:- For students majoring in physical education.

3 hours	E	12	MWF		Gedvilas

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

1 hour	A	8	MWF	Audit.	Moldenhauer
	B	9	MWF	Audit.	Moldenhauer
	C	10	MWF	Audit.	Moldenhauer
*Classes will meet for	D	11	MWF	Audit.	Moldenhauer
1½ hours.	*NP	10	TT	Audit.	Pesavento
	PQ	11	TT	Audit.	Pesavento
	QR1	12	TT	Audit.	Pesavento
	QR2	12	TT	Audit.	Moldenhauer
	ST	2	TT	Audit.	Pesavento

P. E. W. 102. MODIFIED ACTIVITIES:- Prerequisite: Recommendation from Health Service.

1 hour	F	1	MWF	Audit.	N. Richardson

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	A	8	MWF	Audit.	Lazar
	B	9	MWF	Audit.	Lazar
	C	10	MWF	Audit.	Lazar
*Classes will meet for	D	11	MWF	Audit.	Lazar
1½ hours.	*NP	10	TT	Audit.	Lazar
	PQ	11	TT	Audit.	Lazar

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P. E. W. 105 or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
1 hour	*ST	2	TT	Audit.	Lazar

*Classes will meet for 1½ hours.

P. E. W. 123. BASKETBALL:-

1 hour	*LM	8	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:-

1 hour	H	3	MWF	Audit.	N. Richardson
	*MN	9	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 130. BADMINTON:- Students to furnish personal equipment.

1 hour	E	12	MWF	Audit.	N. Richardson

P. E. W. 135. ARCHERY:- (Supplemented by Varied Sports) Students to furnish personal equipment.

1 hour	*NP	10	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 140. BOATING & FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish boats, canoes, life jackets, etc.

1 hour	*PQ	11	TT	Audit.	Moldenhauer

*Classes will meet for 1½ hours.

P. E. W. 141. STUNTS AND TUMBLING:-

1 hour	F	2	MWF	Audit.	N. Richardson

P. E. W. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P. E. W. 144. FOLK DANCING:-

P. E. W. 144. FOLK DANCING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	E	12	MWF	Audit.	Barton

PHYSICAL SCIENCE

Physical Science 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and coordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and D. G. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. N	10	TT	204	Meloy
	Lab. 1	9-12	M	85	Meloy
	Quiz 1	10	W	80	Meloy
	Lab. 2	1-4	M	85	R. Miller
	Quiz 2	10	F	80	R. Miller
	Lab. 3	1-4	W	85	R. Miller
	Quiz 3	1	F	80	R. Miller
	Lab. 4	1-4	F	85	Meloy
	Quiz 4	2	W	80	Meloy
	Lab. 5	2-5	Tu	85	Cowin
	Quiz 5	3	F	80	Cowin
	Lab. 6	2-5	Th	85	Cowin
	Quiz 6	10	M	76	Cowin

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT AND SOUND):- Prerequisite: Math. 114 or 117.

5 hours	Lec. X	11	Tu	127	
	Quiz A1	8	MWF	134	Silkett
	Lab. A	8-11	Tu	117-122	Silkett
*For architecture students only.	Quiz B1	9	MWF	134	Silkett
	Lab. B	8-11	Th	117-122	Silkett
	Quiz D1	11	MWF	134	Livermore
	Lab. D	3-6	Tu	117-122	Livermore
	*Quiz F1	1	MWF	134	Snyder
	Lab. F	3-6	F	117-122	Snyder
	Quiz H1	3	MWF	134	Livermore
	Lab. H	3-6	Th	117-122	Livermore

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS:- Prerequisite: Physics 101.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. X	11	Th	127	
	Quiz D1	11	MWF	144	Johnson
	Lab. D	3-6	Th	124-122	Johnson
	Quiz G1	2	MWF	134	Johnson
	Lab. G	3-6	Tu	124-122	Johnson

Physics 105. NURSES' PHYSICS:- Prerequisite: Sophomore standing or consent of instructor.

4 hours	Quiz D1	11	MWTF	123	Silkett

Physics 106. GENERAL PHYSICS (MECHANICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Math. 132, 133, or 137.

4 hours	Lec. X	11	M	127	
	Lec. Y	2	M	127	
	Quiz C1	10	WF	134	Price
	Lab. C	3-6	W	117	Price
	Quiz L1	8	TT	134	Snyder
	Lab. L	8-11	M	117	Snyder
	Quiz P1	11	TT	134	Skadeland
	Lab. P1	8-11	F	117	Skadeland
	Quiz Q1	12	TT	134	Railsback
	Lab. Q2	12-3	M	117	Railsback
	Quiz S1	2	TT	144	
	Lab. S1	3-6	M	117	
	Quiz S2	2	TT	134	Skadeland
	Lab. S2	8-11	W	117	Skadeland
	Quiz T1	3	TT	134	Anderson
	Lab. T	12-3	F	117	Anderson

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS): - For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106, Math. 142 or 143 or concurrent registration therein.

4 hours	Lec. X	11	W	127	
	Lec. Y	2	W	127	
	Quiz L1	8	TT	144	McNeil
	Lab. L	8-11	M	124	McNeil
	Quiz M1	9	TT	134	Minkler
	Lab. M	3-6	W	124	Minkler
	Quiz P1	11	TT	144	Anderson
	Lab. P1	8-11	F	124	Anderson
	Quiz P2	11	TT	113	Minkler
	Lab. P2	12-3	M	124	Minkler
	Quiz S1	2	TT	123	Moulton

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. S1	8-11	W	124	Snyder
	Quiz S2	2	TT	113	Kromhout
	Lab. S2	12-3	W	124	Minkler

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106, Math. 142, or Math. 143, or concurrent registration therein.

4 hours	Lec. X	11	F	127	
	Quiz P1	11	TT	123	McNeil
	Lab. P	3-6	W	122	McNeil

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: Physics 106 and 107, Math. 142 or Math. 143.

4 hours	Quiz G1	2	MWF	207	Moulton
	Lab. G	3-6	Th	207	Kromhout

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the students with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	B1	9	MWF	82	Gabis
	S1	2	MTT	94	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	82	Gabis
	M1	9	MTT	94	Barber
	N1	10	MTT	97	Barber
	S1	2	TT	24	Gabis
		3	Th	24	Gabis
	T1	3	MTT	94	Barber
	U1	3	Tu	97	Gabis
		4	TT	97	Gabis

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcements; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150, or consent of the department.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	F1	1	MWF	97	Gabis

[1]Students may not receive credit for both Political Science 151 and 101 and 102.

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Sophomore standing.

4 hours	Lec. B1	9	WF	218	Heilman
	Quiz C1	10	WF	97	Heilman
	Quiz G1	2	WF	96	Sanderson
	Quiz M1	9	TT	96	Sanderson
	Quiz N1	10	TT	96	Heilman
	Quiz P1	11	TT	97	Heilman
	Lec. P1	11	TT	218	Lipman
	Quiz D1	11	WF	20	Howard
	Quiz E1	12	WF	14	Howard
	Quiz G2	2	WF	82	Howard
	Quiz H1	3	WF	94	Rosenbaum
	Quiz S1	2	TT	229	Kell

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or its equivalent, or junior standing.

4 hours	Lec. C1	10	WF	218	Lipman
	Quiz E1	12	WF	82	Heilman
	Quiz M1	9	TT	82	Heilman
	Quiz N1	10	TT	23	Lipman

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:- Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Econ. 170 or Math. 161. Prerequisite: Psych. 100, 103, or 106.

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	97	Feinstein

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination.

No credit	A1	8	MWF	201	Timmis
	B1	9	MWF	201	Hegie
	C1	10	MWF	201	Mackin
*Admission by consent of Division of Humanities.	C2	10	MWF	202	Timmis
	D1	11	MWF	201	Hegie
	E1	12	MWF	201	Kenny
	*E2	12	MTWTF	202	Kirstein
	F1	1	MWF	201	Timmis
	G1	2	MWF	201	Kenny
	*G2	2	MTWTF	202	Kirstein
	G3	2	MWF	203	Hegie
	H1	3	MWF	201	Kenny
	J1	4	MWF	201	Kenny
	M1	9	MTT	202	S. Miller
	N1	10	MTT	203	
	N2	10	MTT	209	Carlson
	P1	11	MTT	202	S. Miller
	Q1	12	MTT	203	Carlson
	S1	2	MTT	209	S. Miller

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

3 hours[1]	A1	8	MWF	202	Stronks
	A2	8	MWF	203	I. Miller
[1] Students with 95 or more credit hours receive only 2 hours credit.	B1	9	MWF	203	Greenwald
	B2	9	MWF	205	Brown
	B3	9	MWF	206	Willett
	B4	9	MWF	209	Vest
	B5	9	MWF	214	Love
	B6	9	MWF	215	I. Miller

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	C1	10	MWF	205	Brown
	C2	10	MWF	211	Greenwald
	C3	10	MWF	214	Willett
	D1	11	MWF	206	Greenwald
	D2	11	MWF	215	Brown
	D3	11	MWF	216	
	D4	11	MWF	212	Waller
	E1	12	MWF	205	Matlaw
	E2	12	MWF	206	Kerwick
	E3	12	MWF	216	Love
	E4	12	M	215	Waller
			WF	203	
	E5	12	M	220	Hipple
			WF	212	
	F1	1	MWF	202	Crumley
	F2	1	MWF	203	
	F3	1	MWF	206	Hegie
	F4	1	MWF	209	Love
	F5	1	MWF	211	Karanikas
	F6	1	MWF	214	I. Miller
	F7	1	MWF	220	Willett
	F8	1	MWF	221	Blum
	F9	1	MWF	222	Hipple
	F10	1	MWF	224	Greenwald
	F11	1	MWF	225	Niederman
	G1	2	MWF	205	
	G2	2	MWF	211	Blum
	G3	2	MWF	214	Crumley
	H1	3	MWF	202	
	H2	3	MWF	203	Karanikas
	H3	3	MWF	205	Crumley
	H4	3	MWF	206	Matlaw
	H5	3	MWF	209	Kirstein
	H6	3	MWF	228	Kerwick
	J1	4	MWF	202	Waller
	J2	4	MWF	203	Karanikas
	J3	4	MWF	205	Kerwick
	J4	4	MWF	206	Matlaw
	J5	4	MWF	209	Kirstein
	J6	4	MWF	215	Blum
	L1	8	MTT	205	Atwood
	M1	9	MTT	216	Nicholas
	M2	9	M	220	
			TT	201	
	M3	9	M	221	
			TT	203	
	N1	10	M	225	Atwood
			TT	201	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	N2	10	M	226	Nicholas
			TT	202	
	N3	10	M	227	Jackman
			TT	205	
	N4	10	M	228	
			TT	211	
	P1	11	M	224	Leonhard
			TT	201	
	P2	11	M	226	Gallagher
			TT	206	
	P3	11	M	227	Richey
			TT	209	
	P4	11	M	228	
			TT	211	
	Q1	12	M	221	Fryer
			TT	201	
	Q2	12	M	222	Atwood
			TT	205	
	Q3	12	M	223	Richey
			TT	206	
	Q4	12	M	228	
			TT	211	
	S1	2	M	222	Nicholas
			TT	201	
	S2	2	M	223	Cassell
			TT	203	
	S3	2	M	225	Freyer
			TT	205	
	S4	2	M	226	Richey
			TT	214	
	S5	2	MTT	216	
	T1	3	MTT	212	Freyer
	T2	3	MTT	214	Cassell
	T3	3	MTT	215	Richey
	U1	4	MTT	211	Freyer

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: Rhetoric 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	206	Mackin
	B1	9	M	223	Mackin
			WF	202	
	B2	9	M	224	Timmis
			WF	212	
	B3	9	M	225	Wright
			WF	227	
	C1	10	MWF	216	Niederman
	C2	10	M	221	Wright

[1] Students with 95 or more credit hours receive only 2 hours credit.

LIBRARY

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
			WF	203	
	D1	11	M	221	Niederman
			WF	202	
	D2	11	M	222	F. Johnson
			WF	203	
	E1	12	MWF	28	J. Johnson
	F1	1	MWF	215	Lease
	F2	1	MWF	216	Mackin
	G1	2	M	228	Kogan
			WF	209	
	H1	3	MWF	211	Hipple
	H2	3	MWF	223	J. Johnson
	J1	4	MWF	212	Kogan
	J2	4	MWF	214	J. Johnson
	J3	4	MWF	216	Hipple
	M1	9	M	226	Gallagher
			TT	206	
	N1	10	M	222	Gallagher
			TT	215	
	P1	11	M	223	Cassell
			TT	216	
	Q1	12	M	226	Cassell
			TT	209	
	S1	2	M	221	Carlson
			TT	211	
	T1	3	MTT	216	Carlson

Rhet. 133. EXPOSITORY WRITING:- Prerequisite: Rhetoric 101 and 102; sophomore standing.

3 hours	F1	1	MWF	226	F. Johnson

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

3 hours	C1	10	MWF	28	Oleksy
	D1	11	MWF	28	Oleksy
	F1	1	MWF	28	Oleksy
	G1	2	MWF	28	Oleksy
	N1	10	MTT	206	Leonhard
	S1	2	MTT	206	Leonhard

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- (Concluded). the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. S1	2	TT	218	Corley
	Quiz G1	2	WF	20	Endelman
	Quiz H1	3	MW	17	Endelman
	Quiz N1	10	TT	21	Corley
	Quiz P1	11	TT	21	Endelman
	Quiz T1	3	TT	22	Endelman

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registrations, in Political Science 150 or 151 or History 151 or 152.

4 hours[1]	Lec. B1	9	M	218	Bill
	Quiz F1	1	MWF	82	Bill
	Quiz L1	8	TTF	16	Bill
	Quiz Q1	12	MTT	94	Riddle
	Quiz S1	2	MTT	82	S. Jones

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

4 hours[1]	Lec. F1	1	M	218	Colby
	Quiz M1	9	TTF	14	Colby
	Quiz N1	10	TTF	14	Colby
	Quiz T1	3	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. F1	1	WF	218	Klassen, others
	Quiz B1	9	WF	21	Lipman

Soc. Sci. 116. FAMILY LIVING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz N1	10	TT	20	Klassen

SOCIOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- Concerned with the scientific study of human societies. Prerequisite: Sophomore standing.

3 hours	C1	10	MW	14	Klassen
		10	F	16	Klassen
	D1	11	MWF	82	Klassen
	F1	1	MWF	94	Endelman
	H1	3	MWF	82	Corley

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

3 hours	D1	11	MWF	94	Endelman

Sociol. 140. SOCIAL CONTROL:- Prerequisite: Sociology 100.

3 hours	P1	11	TT	17	Klassen
		12	Th	17	Klassen

ANTHROPOLOGY

Anthrop. 102. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology.

3 hours	D1	11	MWF	96	Corley
	P1	11	TT	23	Corley
		12	Th	23	Corley

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

Spanish 101. ELEMENTARY SPANISH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	225	Patlogan
	C1	10	TWTF	227	Marsh
	D1	11	TWTF	227	Patlogan
	G1	2	TWTF	225	Marsh
	J1	4	TWTF	225	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Prerequisite: Spanish 101, or one year of high school Spanish.

4 hours[1]	B1	9	TT	215	Patlogan
			WF	216	
	H1	3	TWTF	225	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102, or two years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	D1	11	TWTF	226	Marsh
	E1	12	TWTF	227	Marsh

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103, or three years of high school Spanish.

4 hours	C1	10	TWTF	225	Sanchez
	E1	12	TWTF	225	Patlogan

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102, or two years of high school Spanish.

2 hours	P1	11	TT	225	Sanchez

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104, or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialect, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

Credit	Section	Hours	Days	Room	Instructor
No credit					
Sept. 28 - Nov. 11	P1	11	TT	217	
Nov. 16 - Jan. 13	P2	11	TT	217	
Sept. 28 - Nov. 11	T1	3	TT	217	
Nov. 16 - Jan. 13	T2	3	TT	217	

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

3 hours[1]	B1	9	MWF	217	Pitt
	B2	9	MWF	219	Hovde
	C1	10	MWF	215	Pitt
[1]Students with 95 or more credit hours receive only 2 hours credit.	C2	10	MWF	219	Hovde
	D1	11	MWF	217	Pitt
	D2	11	MWF	219	Crews
	E1	12	MWF	214	
	E2	12	MWF	219	Hovde
	F1	1	MWF	217	
	F2	1	MWF	219	Crews
	G1	2	MWF	217	Thompson
	G2	2	MWF	219	
	H1	3	MWF	217	Thompson
	H2	3	MWF	219	Rudin
	J1	4	MWF	217	
	J2	4	MWF	219	Rudin
	N1	10	M	220	Goulson
			TT	219	
	P1	11	M	220	Goulson
			TT	219	
	S1	2	M	220	Hovde
			TT	217	
	U1	4	M	220	Crews
			TT	219	

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice.

2 hours[1]	C1	10	MWF	217	Rigler
	G1	2	MWF	215	Crews

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	Q1	12	TT	217	Hovde

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	N1	10	TT	217	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretations, analysis, and oral reading of prose literature and verse.

2 hours[1]	M1	9	TT	219	Goulson
	S1	2	TT	219	
	T1	3	TT	219	Crews

[1]Students with 95 or more credit hours receive only 1 hour credit.

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 142 or 147.

2 hours	Q1	12	TT	144
	U1	4	TT	113

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142 or 147.

4 hours	C1	10	MTWF	113

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142.

5 hours	B1	9	MTWTF	113
	E1	12	MTWTF	113

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 122 or 127. For architecture students only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	J1	4	MWF	113	

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T. A. M. 150.

3 hours	H1	3	MWF	113	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T. A. M. 150 or T. A. M. 154 or T. A. M. 156.

3 hours	C1	10	MWF	123	

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T. A. M. 221.

1 hour	C	8-10	F	61	

IDEN. NUMBER_____

Date_____

Name in full_____
[Print] [Last name first; then given names]

College_____

Curriculum_____

Address_____
(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____ Examiner and Recorder's Stamp Here

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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TIME TABLE

First Semester, 1954-55

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
NAVY PIER

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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 3
Calendar, First Semester, 1954-55..... 4
First Semester Registration Schedule..... 5
Legend for Section Letters..... 5
Chicago Undergraduate Division Calendar, 1954-55..... 6
Urbana Calendar..... 7
Accountancy..... 8,9
Anthropology..... 54
Architecture..... 9,10
Art..... 10,11
Biological Sciences..... 11-14
Business Law..... 14
Chemistry..... 14-19
Civil Engineering..... 19
Economics..... 19-21
Education..... 21
Electrical Engineering..... 21
English..... 22,23
French..... 23,24
General Engineering..... 24-26
Geography..... 26,27
Geology..... 27,28
German..... 28,29
History..... 29,30
Humanities..... 30,31
Hygiene..... 31,32
Management..... 32
Marketing..... 32
Mathematics..... 32-36
Mechanical Engineering..... 36,37
Military Science and Tactics..... 37,38
Music..... 38,39
Philosophy..... 39
Physical Education for Men..... 39-43
Physical Education for Women..... 43-45
Physical Sciences..... 45
Physics..... 45-47
Political Science..... 47,48
Psychology..... 48,49
Rhetoric..... 49-52
Social Sciences..... 52-54
Sociology..... 54
Spanish..... 54,55
Speech..... 55-57
Theoretical and Applied Mechanics..... 57,58

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PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester 1954-55

FORMER STUDENTS ONLY

Liberal Arts and Sciences

A - E	Monday	September 13	1 - 4 p.m.	Frame 14
F - K	Tuesday	September 14	9 - 12 noon	Frame 14
L - Q	Tuesday	September 14	1 - 4 p.m.	Frame 14
R - Z	Wednesday	September 15	9 - 12 noon	Frame 14

Commerce

A - E	Monday	September 13	1 - 4 p.m.	Room 27
F - K	Tuesday	September 14	9 - 12 noon	Room 27
L - Q	Tuesday	September 14	1 - 4 p.m.	Room 27
R - Z	Wednesday	September 15	9 - 12 noon	Room 27

Engineering and Architecture

No regular pre-advisement period. Pre-advisement was accomplished during the second semester 1953-54.

Physical Education

No pre-advisement period is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

First Semester, Fall 1954

Tues., Sept. 7 - Wed., Sept. 15	Orientation Period
Thurs., Sept. 16 - Sat., Sept. 18	Registration (Students registering for less than 12 hours report at 10:30 a.m., Sat., Sept. 18, for registration.)
Mon., Sept. 20	Instruction Begins
Wed., Sept. 22, 1:00 p.m.	Earliest time at which program changes may be made.
Mon., Sept. 27, 4:00 p.m.	Latest date for changes of study-lists without fee.
Fri., Oct. 1, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Nov. 5, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 12, 12:00 noon	Mid-semester grades due.
Fri., Nov. 12, 4:00 p.m.	Latest date of withdrawals for rebate of one-half fees.
Wed., Nov. 24, 6:00 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 8:00 a.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to Union, 1818) (Not a holiday)
Fri., Dec. 10, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal.
Tues., Dec. 14, 4:00 p.m.	Students withdrawing on or after this date must petition for readmissi
Wed., Dec. 22, 6:00 p.m.	Christmas Vacation begins
Mon., Jan. 3, 8:00 a.m.	Christmas Vacation ends
Fri., Jan. 14 - Sat., Jan. 22	Semester Examinations
Mon., Jan. 24, 10:00 a.m.	General Educational Development Tests, College Level, Room 300 (For all veterans who entered the Fall Semester, 1954, as beginning freshmen.)

FIRST SEMESTER REGISTRATION SCHEDULE

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 2 p.m., Saturday, September 18, 1954, will be assessed a late registration fee of $5.00.

A - Bus	Thursday, September 16	9 a.m.
But - Ez	Friday, September 17	10 a.m.
Fa - Han	Thursday, September 16	2 p.m.
Hao - Kok	Thursday, September 16	10 a.m.
Kol - Mbz	Friday, September 17	9 a.m.
Mca - Rz	Thursday, September 16	9 a.m.
S - Tao	Thursday, September 16	1 p.m.
Tap - Z	Thursday, September 16	11 a.m.

NEW STUDENTS

A - Dea	Friday, September 17	2 p.m.
Deb - Har	Saturday, September 18	9 a.m.
Has - Lee	Friday, September 17	1 p.m.
Lef - Par	Friday, September 17	3 p.m.
Pas - Sok	Saturday, September 18	10 a.m.
Sol - Z	Friday, September 17	11 a.m.

Students registering for less than 12 semester hours will register 10:30 a.m. Saturday, September 18.

LEGEND FOR SECTION LETTERS*

5, 4, and 3 hour

Hour	courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, and Engineering Sciences.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1954-55

First Semester (Fall, 1954)

Wed., Sept. 8 - Wed., Sept. 15	Orientation Period
Thurs., Sept. 16 - Sat., Sept. 18	Registration
Mon., Sept. 20	Instruction Begins
Wed., Nov. 24, 6 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 8 a.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818) (Not a holiday)
Wed., Dec. 22, 6 p.m.	Christmas Vacation begins
Mon., Jan. 3, 8 a.m.	Christmas Vacation ends
Fri., Jan. 14 - Sat., Jan. 22	Semester Examinations

Second Semester (Spring, 1955)

Mon., Jan. 31 - Wed., Feb. 2	Orientation Period
Thurs., Feb. 3 - Sat., Feb. 5	Registration
Mon., Feb. 7	Instruction Begins
Wed., Mar. 2	University Day (University opened, 1868) (Not a holiday)
Thurs., Apr. 7, 6 p.m.	Easter Vacation begins
Wed., Apr. 13, 8 a.m.	Easter Vacation ends
Fri., May 6	Honors Day
Mon., May 30	Memorial Day
Tues., May 31 - Wed., June 8	Semester Examinations

Summer Session - 1955

Fri., June 17 - Sat., June 18	Registration
Mon., June 20	Instruction Begins
Mon., July 4	Independence Day
Fri., Aug. 12 - Sat., Aug. 13	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1954-55

First Semester (Fall, 1954)

Tues., Sept. 7 - Fri., Sept. 10	Entrance Examinations
Mon., Sept. 13 - Sat., Sept. 18	Freshman Week and Registration
Mon., Sept. 20	Instruction Begins
Wed., Nov. 24, 1 p.m.	Thanksgiving Vacation begins
Mon., Nov. 29, 1 p.m.	Thanksgiving Vacation ends
Fri., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Sat., Dec. 18, 12 noon	Christmas Vacation begins
Mon., Jan. 3, 1 p.m.	Christmas Vacation ends
Fri., Jan. 21 - Sat., Jan. 29	Semester Examinations
	No Commencement Exercises

Second Semester (Spring, 1955)

Tues., Feb. 1 - Fri., Feb. 4	Entrance Examinations
Mon., Feb. 7 - Wed., Feb. 9	Registration
Thurs., Feb. 10	Instruction Begins
Wed., Mar. 2	University Day (University opened, 1868)
Thurs., Apr. 7, 1 p.m.	Easter Vacation begins
Wed., Apr. 13, 1 p.m.	Easter Vacation ends
Fri., Apr. 29	Honors Day (Classes dismissed at noon)
Mon., May 30	Memorial Day
Thurs., June 2 - Fri., June 10	Semester Examinations
Sun., June 19	Commencement Exercises

Summer Session - 1955

Tues., June 7 - Fri., June 10	Entrance Examinations
Fri., June 17 - Sat., June 18	Registration
Mon., June 20	Instruction Begins
Mon., July 4	Independence Day
Fri., Aug. 12 - Sat., Aug. 13	Summer Session Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Students who present one unit of bookkeeping for entrance should register in Accy. 102. They will not be allowed full credit in Accy. 101 unless high school bookkeeping credit can be dropped. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	24	Schneider
	C1	10	MWF	25	Fox
	D1	11	MWF	17	Graff
[1]Students with 95	D2	11	MWF	16	
or more credit hours	E1	12	MWF	17	Graff
receive only 2 hours	F1	1	MWF	24	Fox
credit.	F2	1	MWF	18	
	G1	2	MWF	24	Fox
	H1	3	MWF	24	Kabbes
	J1	4	MWF	24	Kabbes
	N1	10	MTT	18	Eggebrecht
	P1	11	MTT	18	Ross
	Q1	12	MTT	22	Schneider
	S1	2	MTT	23	Schneider
	T1	3	MTT	20	Graff
	U1	4	MTT	19	

Accy. 102. PRINCIPLES OF ACCOUNTING:- Similar to Accy. 101. Students who have one unit entrance credit in bookkeeping should take this course rather than Accy. 101. Students who have failed Accy. 101 may register in Accy. 102 and will receive credit as in Accy. 101 if their final grade is "C" or above.

2 hours[1]	M1	9	TT	18	Eggebrecht
	Q1	12	TT	18	Ross
	T1	3	TT	19	

[1]Students with 95 or more credit hours will receive only 1 hour credit.

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101 or 102. Prerequisite: Accy. 101 or 102.

3 hours[1]	B1	9	MWF	18	Eggebrecht
	F1	1	MWF	19	Eggebrecht
	J1	4	MWF	23	Yankow
[1]Students with 95	M1	9	MTT	21	Yankow
or more credit hours	Q1	12	MTT	21	Yankow
receive only 2 hours credit.					

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing, credit or registration in Econ. 102 or Econ. 108.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	24	Kabbes
	E1	12	MWF	24	Kabbes
	F1	1	MWF	17	Ross
	G1	2	MWF	17	Ross
	U1	4	MTT	20	Graff

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: Sophomore Standing; Accy. 105.

3 hours	D1	11	MWF	22	Schneider
	F1	1	MWF	21	Yankow

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	1	W	251	Walley
	Lab. A	10-12	MWF	242	Walley
	Lab. B	2-4	MWF	242	Walley

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. G	3	MF	251	DeFilipps

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G.E. 108.

3 hours	Lec.	2	W	251	Rathbun
	Lab. A	2-5	TT	241	Rathbun
		3-5	W	241	Rathbun
	Lab. B	9-12	MF	241	Rathbun
		10-12	W	241	Rathbun
	Lab. C	9-12	MF	242	White
		10-12	W	242	White

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

Arch. 132. ARCHITECTURAL DESIGN:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	10	W	251	DeFilipps
	Lab. A	2-5	TT	241	DeFilipps
		2-4	W		

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	2-5	TWT	241	White

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	Lab. H	2	MF	251	Mikolajczyk

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lab. G	12	TT	251	Mikolajczyk

ART

Art 111. SURVEY OF ART HISTORY:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	Sec. A	11	MWF	251	Radice

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Sec. A	9	MWF	251	Radice
	Sec. B	4	MWF	251	McNee

Art 181. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture.

2 hours	Sec. A	8-11	TT	83	Burr
	Sec. B	8-11	MF	83	McNee
	Sec. C	2-5	TT	83	Burr
	Sec. D	2-5	MF	83	Shopen
	Sec. E	8-11	TT	84	McNee

Art 182. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 181.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Sec. A	8-11	TT	91	J. Richardson
	Sec. B	2-5	TT	91	Shopen

Art 183. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 182.

2 hours	Sec. A	8-11	MF	91	Shopen
	Sec. B	2-5	TT	84	J. Richardson
	Sec. C	3-6	MF	84	Burr

Art 184. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 183.

2 hours	Sec. A	8-11	MF	84	J. Richardson

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz. Students registering in lecture B1 may take laboratory sections 1 through 6 only. Students registering in lecture M1 may take laboratory sections 7 through 12 only. Students registering in lecture F1 may take laboratory sections 13 through 19 only. Students registering in lecture Q1 may take laboratory sections 20 through 26 only.

4 hours[1]	Lec. B1	9	WF	210	Glassman
	Lab. 1	12-2	WF	43	McMillan
	Quiz 1	12	M	43	McMillan
	Lab. 2	2-4	WF	43	Pickett
	Quiz 2	2	M	43	Pickett
	Lab. 3	2-4	TT	43	McQuate
	Quiz 3	3	M	43	McQuate
	Lab. 4	4-6	WF	43	McMillan
	Quiz 4	4	M	43	McMillan
	Lab. 5	11-1	TT	44	McQuate
	Quiz 5	12	M	44	McQuate
	Lab. 6	12-2	WF	44	McQuate
	Quiz 6	1	M	44	McQuate
	Lec. F1	1	WF	210	Little
	Lab. 13	8-10	TT	48	Rouffa
	Quiz 13	8	M	48	Rouffa
	Lab. 14	8-10	WF	46	Spirakis
	Quiz 14	9	M	46	Spirakis

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 15	8-10	TT	46	Madison
	Quiz 15	8	M	46	Madison
	Lab. 16	10-12	WF	46	Spirakis
	Quiz 16	11	M	46	Spirakis
	Lab. 17	4-6	TT	46	Little
	Quiz 17	4	M	46	Little
	Lab. 18	4-6	WF	46	Little
	Quiz 18	1	M	43	Little
	Lab. 19	10-12	WF	48	Madison
	Quiz 19	11	M	48	Madison
	Lec. M1	9	TT	210	Glassman
	Lab. 7	4-6	TT	44	Presley
	Quiz 7	4	F	44	Presley
	Lab. 8	11-1	TT	46	
	Quiz 8	12	M	46	
	Lab. 9	12-2	WF	46	Hered
	Quiz 9	1	M	46	Hered
	Lab. 10	2-4	TT	46	Little
	Quiz 10	3	M	46	Little
	Lab. 11	12-2	WF	48	Glassman
	Quiz 11	1	M	48	Glassman
	Lab. 12	2-4	TT	48	Hered
	Quiz 12	2	M	48	Hered
	Lec. Q1	12	TT	210	Pickett
	Lab. 20	8-10	WF	44	McQuate
	Quiz 20	8	M	44	McQuate
	Lab. 21	4-6	MW	44	Presley
	Quiz 21	12	M	48	Presley
	Lab. 22	2-4	WF	46	Presley
	Quiz 22	2	M	46	Presley
	Lab. 23	8-10	TT	45	McMillan
	Quiz 23	8	M	45	McMillan
	Lab. 24	10-12	WF	45	Hered
	Quiz 24	10	M	45	Hered
	Lab. 25	8-10	WF	48	
	Quiz 25	9	M	48	
	Lab. 26	4-6	TT	48	Hered
	Quiz 26	4	M	48	Hered

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Biology 111. GENERAL BOTANY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. E1	12	WF	210	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
	Quiz 1	10	M	48	Rouffa
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	2-4	WF	48	Rouffa
	Quiz 2	3	M	48	Rouffa

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. N1	10	TT	218	Madison
	Lab. 1	8-10	WF	43	Madison
	Quiz 1	9	M	43	Madison
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	10-12	WF	43	McMillan
	Quiz 2	10	M	43	McMillan

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. P1	11	TT	210	Hopkins
	Lab. 1	8-10	TT	44	Hopkins
	Quiz 1	9	M	44	Hopkins
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	10-12	WF	44	Hopkins
	Quiz 2	11	M	44	Hopkins
	Lab. 3	2-4	WF	44	Shank
	Quiz 3	2	M	44	Shank
	Lab. 4	2-4	TT	44	Presley
	Quiz 4	3	M	44	Presley

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. D1	11	MWF	210	Shank

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 1	10-1	TT	45	Grubgeld
	Lab. 2	2-4	MWF	45	Grubgeld
	Lab. 3	4-6	MWF	45	Grubgeld

Biology 141. VERTEBRATE PHYSIOLOGY:- This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. S1	2	TT	218	Sangster
	Lab. 1	8-10	TT	43	Spirakis
	Quiz 1	10	Th	43	Spirakis
	Lab. 2	11-1	TT	43	Spirakis
	Quiz 2	10	Tu	43	Spirakis

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. C1	10	MWF	210	Sangster
	Lab. 1	12-2	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	B1	9	MWF	25	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

5 hours[1]	Lec. C	10	WF	204	Bachrach

[1]Students who have received entrance credit for high school chemistry

Chem. 101. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
are given only 3 hours credit for Chem. 101. Students with 95 or more credit hours receive only 3 hours credit.	Lab. 1	8-10	MWF	53	
	Quiz 1	9	TT	80	
	Lab. 2	10-12	MTT	53	Bachrach
	Quiz 2	11	WF	80	Bachrach
	Lab. 3	8-11	TT	53	Seabright
	Quiz 3	9	MW	76	Seabright
	Lab. 4	12-2	MWF	53	Cowin
	Quiz 4	12	TT	76	Cowin
NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING	Lab. 5	1-3	MWF	53	
	Quiz 5	2	TT	74	
	Lab. 6	2-4	MWF	53	Bachrach-Harris
	Quiz 6	3	TT	76	Bachrach
	Lab. 7	2-5	TT	53	Ullman
	Quiz 7	10	TT	75	Ullman

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

3 hours[1]	*Lec. B	9	WF	204	Schrage
	Lab. 11	8-10	M	53	
	Quiz 11	9	TT	76	
[1]Students below the rank of senior receive 5 hours credit provided their high school chemistry has not been used for entrance and their final grade in Chem. 102 is "C" or above. Students with 95 or more credit hours receive only 2 hours credit.	Lab. 12	10-12	M	53	Schrage
	Quiz 12	11	TT	76	Schrage
	Lab. 13	12-2	M	53	
	Quiz 13	1	WF	75	
	Lab. 14	2-4	M	53	Mansfield
	Quiz 14	3	WF	74	Mansfield
	Lab. 15	9-11	W	53	Cowin
	Quiz 15	9	TT	75	Cowin
	Lab. 16	11-1	Th	53	Questiaux
	Quiz 16	11	TuF	75	Questiaux
	**Lec. M	9	TT	204	Schrage
	Lab. 21	8-10	M	50	
	Quiz 21	9	WF	75	
	Lab. 22	10-12	Th	50	
*NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING	Quiz 22	11	Tu	74	
		11	F	76	
	Lab. 23	11-1	F	50	
	Quiz 23	12	TT	74	
**FOR STUDENTS IN THE COLLEGE OF ENGINEERING ONLY	Lab. 24	2-4	Tu	50	Schrage
	Quiz 24	3	MW	75	Schrage

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics 111 or 112.

Chem. 103. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. H	3	WF	204	Hunt
	Lec. P	11	TT	204	Hunt
	Lab. 26	11-1	TT	50	
[1]Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.	Quiz 26	12	MW	75	
	Lab. 27	10-12	WF	50	Rennagel
	Quiz 27	10	TT	74	Rennagel
	Lab. 28	10-12	MW	50	Harris
	Quiz 28	12	WF	80	Harris
	Lab. 29	1-3	WF	50	
	Quiz 29	3	TT	75	
	Lab. 30	12-2	MW	50	Seabright
	Quiz 30	12	TT	75	Seabright
	Lab. 31	11-1	WF	50	Hunt
	Quiz 31	1	MW	74	Hunt
	Lab. 32	2-4	TT	50	Seabright
	Quiz 32	2	MW	74	Seabright
	Lab. 33	2-4	TT	50	Rennagel
	Quiz 33	2	MW	75	Rennagel
	Lab. 34	3-5	MF	50	Hunt-Rennagel
	Quiz 34	3	TT	80	Hunt
	Lab. 35	4-6	MW	50	Rennagel
	Quiz 35	4	TT	75	Rennagel
	Lab. 36	9-11	WF	50	Ullman
	Quiz 36	11	WF	74	Ullman
	Lab. 37	1-3	MW	50	Ullman
	Quiz 37	4	MW	76	Ullman
	Lab. 38	8-10	TT	50	
	Quiz 38	11	MW	75	

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chemistry 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. D	11	WF	204	Huitema
	Lab. 41	8-10	MW	50	Sackheim
	Quiz 41	8	TT	75	Sackheim
[1]Credit in Chem. 104 will not be granted to students who have received credit in Chem. 105 or 106. Students with 95 or more credit hours receive only 3 hours credit.	Lab. 42	10-12	TT	50	Sackheim
	Quiz 42	10	WF	75	Sackheim
	Lab. 43	12-2	MW	50	Sackheim
	Quiz 43	12	TT	80	Sackheim
	Lab. 44	2-4	MW	50	Harris
	Quiz 44	2	TT	75	Harris
	Lab. 45	3-5	TT	50	Harris
	Quiz 45	11	TT	80	Harris

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. Prerequisite: Chemistry 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. G	2	WF	210	Stubblefield
	Lab. 51	8-10	MWF	53	Hedberg
	Quiz 51	8	TT	74	Hedberg
	Lab. 52	10-12	MWF	53	Stubblefield-Hedberg
	Quiz 52	10	TT	76	Stubblefield
	Lab. 53	12-2	MWF	53	Questiaux
	Quiz 53	2	TT	76	Questiaux
	Lab. 54	2-5	TT	53	Stubblefield
	Quiz 54	4	WF	75	Stubblefield

[1]Credit in Chem. 105 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. Prerequisite: Chemistry 101, 102, or 103.

5 hours[1]	Lec. N	10	TT	210	Mueller
	Lab. 61	10-12	MWF	50	Mueller-R.Miller
	Quiz 61	1	MW	80	Mueller
	Lab. 62	2-5	TT	50	Mueller
	Quiz 62	3	MW	76	Mueller

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

5 hours[1]	Lec. S	2	TT	204	Tyree
	Lab. 71	10-12	TT	53	Tyree
	Quiz 71	10	MWF	74	Tyree
	Lab. 72	3-5	TT	53	Tyree
	Quiz 72	2	MWF	76	Tyree

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- (Concluded). who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Pre-medical students requiring more than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry. Graduation from high school in the upper quarter of the high school class.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. G	2	MWF	204	Huitema
	Lab. 66	9-12	Th	50	Hedberg
	Quiz 66	1	WF	76	Hedberg
	Lab. 67	10-1	Tu	50	Hedberg
	Quiz 67	11	MW	76	Hedberg
	Lab. 68	2-5	Th	50	Huitema
	Quiz 68	4	WF	74	Huitema

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106

5 hours	Lec. E	12	MW	65	Mansfield
	Lab. 76	9-1	TT	53	Mansfield
	Quiz 76	10	WF	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. Prerequisite: Chemistry 104, 105, or 106.

5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	8-11	MWF	54	Gottlieb
	Quiz 81	10	Th	80	Gottlieb
	Lab. 82	1-4	MWF	54	Gottlieb
	Quiz 82	2	Tu	80	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in the Chemistry curriculum and Chemical Engineering. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. T	3	TT	204	Babler
	Lab. 86	8-11	MWF	54	Babler
	Quiz 86	10	Tu	80	Babler
	Lab. 87	3-6	MWF	54	
	Quiz 87	4	Th	74	

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chemistry 105 or 110.

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	
	Lab. 91	8-11	MW	52	Questiaux
	Quiz 91	9	F	76	Questiaux
	Lab. 92	9-12	TT	52	Crum
	Quiz 92	10	M	75	Crum
	Lab. 93	2-5	WF	52	Crum
	Quiz 93	2	M	80	Crum

CIVIL ENGINEERING

C. E. 103. ROUTE SURVEYING:- Prerequisite: Credit in civil engineering summer camp.

3 hours	A	9-12	MWF	63

C. E. 105. SURVEYING:- Prerequisite: G.E. 101 and Math. 123.

2 hours	Lec. A	9	Tu	63
	Lab. A	9-12	Th	63

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	F1	1	MWF	63

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

2 hours	A	2-4	TT	61 & 63

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	19	Knudson
	D1	11	MWF	21	Knudson
	F1	1	MWF	22	Williams
	H1	3	MWF	23	Berg
	N1	10	MTT	19	Berg
	Q1	12	MTT	19	Berg

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

Econ. 102. PRINCIPLES OF ECONOMICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	17	Geldard
	C1	10	MWF	24	Derrick
	E1	12	MWF	18	Geldard
	F1	1	MWF	20	Jung
	H1	3	MWF	25	Grampp
	J1	4	MWF	25	Grampp
	N1	10	MTT	16	
	S1	2	MTT	20	Jung

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	B1	9	MWF	20	O. Miller
	C1	10	MWF	20	O. Miller
	G1	2	MWF	25	Dunne

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	D1	11	MWF	25	Grampp
	F1	1	MWF	25	Grampp
	G1	2	MWF	18	Larson
	P1	11	MTT	20	Larson
	Q1	12	MTT	20	Larson

Econ. 136. ECONOMIC HISTORY OF THE UNITED STATES:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. For freshmen only.

3 hours	B1	9	MWF	23	Gillett
	C1	10	MWF	21	J. Morris
	D1	11	MWF	23	Jung
	E1	12	MWF	25	J. Morris
	E2	12	MWF	23	Gillett
	F1	1	MWF	16	
	G1	2	MWF	22	O. Miller
	G2	2	MWF	16	
	H1	3	MWF	22	O. Miller
	J1	4	MWF	21	J. Morris
	M1	9	MTT	22	Williams
	M2	9	MTT	16	
	N1	10	MTT	22	Williams
	S1	2	MTT	21	Knudson
	T1	3	MTT	21	Knudson
	U1	4	MTT	22	Jung

Econ. 138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	17	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108; sophomore standing in Commerce.

3 hours	B1	9	MW	33	Dunne
	Prac. I	9-11	F	33	Dunne
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	S1	2	TT	28	Ricks
	T1	3	TT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture and architectural engineering students only.

3 hours	D1	11	MWF	123	Klapperich

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Credit or registration in Physics 107 and Math. 143.

4 hours	B1	9	MWF	123	Klapperich
	Lab. P	8-11	Th	120	

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	C1	10	MWF	223	F. Johnson
	E1	12	MWF	229	I. Miller
	F1	1	MWF	205	Brown
	G1	2	MWF	229	J. Johnson
	P1	11	MTT	205	Jackman

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. See note under Engl. 101.

3 hours[1]	B1	9	MWF	229	Niederman
	C1	10	MWF	229	Love
	F1	1	MWF	212	Matlaw
	H1	3	MWF	229	Waller
	Q1	12	MTT	212	Leonhard

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoyevsky's CRIME AND PUNISHMENT, E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101.

3 hours[1]	E1	12	MWF	211	Karanikas
	F1	1	MWF	227	Wright
	G1	2	MWF	227	Kerwick
	H1	3	MWF	227	Kogan
	M1	9	MTT	227	Atwood
	S1	2	MTT	212	Gallagher

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 113. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers. From 1620 to the Civil War. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

Engl. 113. AMERICAN LITERATURE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	209	Lease
	G1	2	MWF	224	Willett
	M1	9	MTT	212	Lease

Engl. 114. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers. From the Civil War to the present. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

3 hours	B1	9	MWF	211	Stronks
	D1	11	MWF	229	Crumley

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, and RASSELAS. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	D1	11	MWF	211	Blum
	N1	10	MTT	212	S. Miller

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	D1	11	MWF	209	Wright
	P1	11	MTT	214	Kogan

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	C1	10	MWF	224	Vest
	P1	11	MTT	203	Nicholas

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. No credit for graduation is given for French 101 without French 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	224	Skogen
	B1	9	TWTF	226	Lenihan
	C1	10	TWTF	226	Lenihan
[1]Students with 95 or more credit hours receive only 3 hours credit.	D1	11	TWTF	224	Skogen
	E1	12	TWTF	224	Skogen
	E2	12	TWTF	226	Cowles
	G1	2	TWTF	226	Cowles
	H1	3	TWTF	224	Lein
	J1	4	TWTF	224	Lein
	J2	4	TWTF	226	Cowles

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	B1	9	TWTF	224	Skogen
	H1	3	TWTF	226	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102, or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	228	Lein
	G1	2	TWTF	228	Lein

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135

G. E. 101. ELEMENTS OF DRAWING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	A2	8-10	MWF	136	
	A4	8-10	MWF	141	
	B1	10-12	MWF	135	
	B3	10-12	MWF	137	
	B4	10-12	MWF	141	
	C1	12-2	MWF	135	
	C3	12-2	MWF	137	
	C4	12-2	MWF	141	
	D1	2-4	MWF	135	
	D3	2-4	MWF	137	
	D4	2-4	MWF	141	
	E2	4-6	MWF	136	
	E3	4-6	MWF	137	
	E4	4-6	MWF	141	
	F1	8-11	TT	135	
	F2	8-11	TT	136	
	F3	8-11	TT	137	
	G1	2-5	TT	135	
	G2	2-5	TT	136	
	G3	2-5	TT	137	

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane and solid geometry.

3 hours	A5	8-10	MWF	143	
	B5	10-12	MWF	143	
	C5	12-2	MWF	143	
	D5	2-4	MWF	143	
	F5	8-11	TT	143	
	G5	2-5	TT	143	

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145	
	F6	8-11	TT	145	
	D6	2-4	MWF	145	
	G6	2-5	TT	145	
	B6	10-12	MWF	145	

G. E. 108. ARCHITECTURAL PROJECTIONS:- Continuation of G. E. 107. Prerequisite: G. E. 107.

2 hours	A7	8-10	MWF	146	
	F7	8-11	TT	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G. E. 101; G. E. 102.

2 hours	D7	2-4	MWF	146	

G. E. 203. AIRCRAFT DRAFTING AND LOFTING:- Aircraft terminology, control, and reference surface systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting, plane, tapered and double curved surfaces, airfoils, intersections; practices and standards. Prerequisite: G. E. 101 and G. E. 102.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F4	8-11	TT	141	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical science; Geography 101 and 104 meet the general education requirement in social science, in the College of Liberal Arts and Sciences. Lectures, discussions, and quiz.

5 hours[1]	Lec. D1	11	WF	218	Cutshall
	Quiz A1	8	MWF	14	Kusch
	Quiz B1	9	MWF	13	Kusch
[1]Students with 95 or more credit hours receive only 4 hours credit.	Quiz F1	1	MWF	14	Cutshall
	Quiz S1	2	TT	13	Kusch
		3	Tu	13	Kusch
	Lec. M1	9	TT	218	Finney
	Quiz A2	8	MWF	13	Finney
	Quiz C1	10	MWF	13	Finney
	Quiz D1	11	MWF	14	Finney
	Quiz G1	2	MWF	14	Cutshall
	Quiz P1	11	TT	13	Finney
		12	Th	13	Finney

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geography 101 or consent of instructor.

3 hours[1]	Q1	12	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MW	14	Cutshall
		9	F	16	Cutshall

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geography 101, or consent of instructor.

3 hours	D1	11	MWF	13	Kusch
	F1	1	MWF	13	Kusch

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

4 hours[1]	Lec. S	2	TT	210	Kurs
	Lab. 1	8-10	Tu	42	Krinsley
	Lab. 2	10-12	Th	42	Kurs
[1]Students with 95	Lab. 3	2-4	M	42	Kurs
or more credit hours	Lab. 4	2-4	W	42	Koucky
receive only 3 hours	Lab. 5	3-5	Tu	42	Koucky
credit.	Lab. 6	3-5	Th	42	Koucky
	Quiz C	10	F	42	Koucky
	Quiz E1	12	M	42	Koucky
	Quiz E2	12	W	42	Koucky
	Quiz E3	12	F	42	Koucky
	Quiz G	2	F	42	Koucky
	Quiz H	3	F	42	Kurs

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 141.

4 hours[1]	Lec. D	11	WF	65	Krinsley
	Lab. 11	8-10	Th	42	Krinsley
	Lab. 12	10-12	Tu	42	Krinsley
[1]Students with 95	Quiz C	10	M	42	Krinsley
or more credit hours	Quiz Q	12	Th	42	Krinsley
receive only 3 hours credit.					

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: One semester of college chemistry.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lab. Discussion	8-10	MWF	42-53	Koucky

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	D	11	MWF	42	Kurs
	Quiz-Discussion				
	F	1	MWF	42	Kurs
	Quiz-Discussion				

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. No credit toward graduation is given for German 101 without German 102.

4 hours[1]	A1	8	TWTF	220	Willner
	A2	8	TWTF	221	Teichmann
	B1	9	TWTF	220	Willner
[1]Students with 95	B2	9	TWTF	221	Vardaman
or more credit hours	C1	10	TWTF	220	Vardaman
receive only 3 hours	D1	11	TWTF	220	Teichmann
credit.	D2	11	TWTF	221	Braunfeld
	E1	12	TWTF	220	Kauf
	E2	12	TWTF	215	Fuller
	G1	2	TWTF	220	Hartoch
	G2	2	TWTF	221	Braunfeld
	H1	3	TWTF	220	Fuller
	J1	4	TWTF	220	Hartoch
	J2	4	TWTF	221	Kauf

German 102. ELEMENTARY COURSE:- Continuation of German 101. Prerequisite: German 101, or one year of high school German.

4 hours[1]	C1	10	TWTF	221	Willner
	E1	12	TWTF	221	Teichmann
	H1	3	TWTF	221	Kauf

[1]Students with 95 or more credit hours receive only 3 hours credit.

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

German 103. INTERMEDIATE COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	B1	9	TWTF	222	Braunfeld
	C1	10	TWTF	222	Braunfeld
	D1	11	TWTF	222	Fuller
	E1	12	TWTF	222	Hartoch
	G1	2	TWTF	222	Fuller
	H1	3	TWTF	222	Hartoch

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Teichmann
	E1	12	TWTF	223	Willner
	G1	2	TWTF	223	Kauf

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102, or two years of high school German; concurrent registration in German 103 or 104.

2 hours	F1	1	WF	223	Vardaman

HISTORY

Hist. 111. MODERN EUROPEAN HISTORY FROM THE RENAISSANCE TO 1815:- Europe from the age of the great discoveries to the close of the Napoleonic wars.

4 hours[1]	Lec. Q1	12	TT	218	Unfer
	Quiz F1	1	MW	96	Unfer
	Quiz G1	2	MW	97	Unfer
[1]Students with 95	Quiz J1	4	MW	97	Unfer
or more credit hours	Quiz S1	2	TT	18	Unfer
receive only 3 hours	Quiz T1	3	TT	18	Unfer
credit.					
	Lec. E1	12	WF	218	Nicholson
	Quiz C1	10	WF	22	Nicholson
	Quiz N1	10	TT	25	Nicholson
	Quiz Q1	12	TT	25	Nicholson

Hist. 131. HISTORY OF ENGLAND TO 1688:- History of the British people to 1688.

Hist. 131. HISTORY OF ENGLAND TO 1688:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	N1	10	TTF	82	Bill
	Q1	12	MTT	82	Bill

[1]Students with 95 or more credit hours receive only 2 hours credit.

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundations, the movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	S. Jones
	Quiz E1	12	MW	13	S. Jones
	Quiz M1	9	TT	24	S. Jones
	Quiz N1	10	TT	24	S. Jones
	Quiz Q1	12	TT	24	S. Jones

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

3 hours	S1	2	TT	16	Nicholson
		3	Th	16	Nicholson

Hist. 152. HISTORY OF THE UNITED STATES, 1865-1954:- A century of national life and organization. Prerequisite: Sophomore standing.

3 hours	N1	10	MTT	94	Riddle

HUMANITIES

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course plus Humanities 102 satisfies the general education requirement in the humanities.

4 hours[1]	S1	2	TT	227	Lease

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- (Concluded). course plus Humanities 152 satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	223	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

2 hours[1]

[1]Students with 95 or more credit hours receive only 1 hour credit.

(For Women)				
A	8	WF	213	Kostka
T	3	TT	213	Schuckmell
U	4	TT	213	Schuckmell
(For Men)				
L	8	TT	213	Wallk
M	9	TT	213	Wallk
B	9	MW	213	O'Neil
C	10	MW	213	O'Neil
F	1	MW	213	Staff
G	2	MW	213	Staff
H	3	WF	213	Staff
J	4	WF	213	Staff

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]

[1]Students with 95 or more credit hours receive only 1 hour credit.

(For Women)				
E	12	WF	213	Kostka
(For Men)				
D	11	WF	213	Grisamore
Q	12	TT	213	Grisamore
S	2	TT	213	Grisamore

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	P	11	TT	Gym	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	C1	10	MWF	23	Gillett
	F1	1	MWF	23	Gillett
	G1	2	MWF	19	Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean.

3 hours	D1	11	MWF	19	Berg
	H1	3	MWF	18	Larson

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- Continuation of Mathematics 101. Prerequisite: Mathematics 101.

3 hours	F1	1	MWF	100	C. Olsen

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	100	Ockert
	A2	8	MTWTF	103	
	B1	9	MTWTF	102	Johannes
	B2	9	MTWTF	103	Hornacek

[1]Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B3	9	MTWTF	104	Ondrak
	B4	9	MWF	100	C. Olsen
	C1	10	MTWTF	102	Gordon
	C2	10	MTWTF	103	Ondrak
	C3	10	MTWTF	104	Curtiss
	C4	10	MWF	100	Hornacek
	D1	11	MTWTF	102	Dinkines
	D2	11	MTWTF	103	
	D3	11	MWF	100	Lariviere
	E1	12	MTWTF	102	Nolan
	E2	12	MTWTF	103	C. Olsen
	E3	12	MTWTF	104	Murphy
	E4	12	MWF	134	Pennisi
	F1	1	MWF	102	Berglund
	F2	1	MWF	103	Scholomiti
	G1	2	MTWTF	102	Ragland
	G2	2	MTWTF	103	Alberti
	G3	2	MTWTF	104	Schmitz
	H1	3	MTWTF	102	Hill
	H2	3	MTWTF	103	Grenard
	H3	3	MTWTF	123	Stelling
	H4	3	MWF	100	Scholomiti
	J1	4	MTWTF	102	Stelling
	J2	4	MTWTF	103	Engert
	J3	4	MTWTF	104	Schmitz
	J4	4	MWF	100	
	M1	9	M	101	Ockert
			TT	100	
	S1	2	M	110	
			TT	97	

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	E1	12	MWF	105	Lariviere
	F1	1	MWF	101	Alberti
	H1	3	MWF	101	Turner
	P1	11	M	101	Scholomiti
	S1	2	M	101	Lariviere
	U1	4	M	101	Scholomiti
			TT	100	

[1] Satisfies deficiency in solid geometry for engineering students; all other students receive full credit.

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
No credit	C1	10	MWF	105	Ockert
	F1	1	MWF	104	Schmitz

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

4 hours	D1	11	TWTF	101	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

3 hours[1]	A1	8	MWF	101	Gordon
	B1	9	MWF	106	Nolan
	D1	11	MWF	105	Ragland
[1]Students with 95	F1	1	MWF	105	
or more credit hours	*F2	1	MWF	111	Ockert
receive only 2 hours	G1	2	MWF	105	Engert
credit.	G2	2	MWF	106	Hill
	*G3	2	MWF	100	Stelling
*For Commerce stu-	H1	3	MWF	104	Lariviere
dents only.	*H2	3	MWF	105	Ragland
	J1	4	MWF	105	Grenard
	*K1	9	M	80	
			TT	105	
	N1	10	M	80	Feinstein
			TT	100	
	Q1	12	M	101	Berglund
			TT	100	
	U1	4	MTT	106	Lariviere

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

2 hours[1]	L1	8	TT	101	Gordon
	M1	9	TT	106	C. Olsen
	N1	10	TT	106	C. Olsen
[1]Students with 95	N2	10	TT	105	Hornacek
or more credit hours	P1	11	TT	105	Ragland
receive only 1 hour	Q1	12	TT	105	Stelling
credit.	Q2	12	TT	111	Ondrak
	S1	2	TT	105	Engert
	S2	2	TT	106	Nolan
	T1	3	TT	104	Ragland

Math. 114. PLANE TRIGONOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	T2	3	TT	105	Murphy
	T3	3	TT	101	Schmitz
	U1	4	TT	105	Grenard
	U2	4	TT	101	Alberti

Math. 117. COMBINED FRESHMAN MATHEMATICS:- A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

5 hours	C1	10	MTWTF	111	Nolan
	D1	11	MTWTF	111	Turner
	H1	3	MTWTF	111	Engert
	J1	4	MTWTF	111	Hill

Math. 122. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, and 114 or 115.

4 hours[1]	B1	9	TWTF	101	Berglund
	G1	2	TWTF	110	Pennisi

[1]Students with 95 or more credit hours receive only 3 hours credit.

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, 114 or 115.

5 hours[1]	A1	8	MTWTF	102	Hornacek
	B1	9	MTWTF	111	Curtiss
	C1	10	MTWTF	110	Frank
	C2	10	MTWTF	101	Johannes
	D1	11	MTWTF	110	Feinstein
	E1	12	MTWTF	110	Grenard
	H1	3	MTWTF	110	Alberti
	J1	4	MTWTF	110	Murphy

[1]Students with 95 or more credit hours receive only 4 hours credit.

Math. 127. COMBINED FRESHMAN MATHEMATICS:- Continuation of Mathematics 117. Prerequisite: Mathematics 117.

4 hours	E1	12	TWTF	101	Frank
	G1	2	TWTF	101	Turner

Math. 132. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122.

5 hours	B1	9	MTWTF	110	Gordon

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122 or 123.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	105	Scholomiti
	C1	10	MWF	106	Hartley
	E1	12	MWF	100	Curtiss
	F1	1	MWF	110	Turner
	G1	2	MWF	113	Feinstein
	P1	11	M	80	Frank

Math. 137. CALCULUS:- For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Mathematics 117 and 127, or consent of department.

3 hours	E1	12	MWF	111	Ondrak

Math. 142. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 132.

3 hours	F1	1	MWF	106	Murphy

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 133.

5 hours	D1	11	MTWTF	106	Berglund
	E1	12	MTWTF	106	Johannes
	G1	2	MTWTF	111	Dinkines
	H1	3	MTWTF	106	Pennisi

Math. 147. CALCULUS:- Continuation of Mathematics 137. Prerequisite: Mathematics 137.

3 hours	D1	11	MWF	104	Hill

Math. 341. DIFFERENTIAL EQUATIONS:- Prerequisite: Mathematics 132 and 142, or 137 and 147.

3 hours	E1	12	MWF	144	Dinkines

MECHANICAL ENGINEERING

M. E. 171. MECHANISM:- Prerequisite: G. E. 101 and registration or credit in Physics 103 or Physics 106.

2 hours	B2	10-12	WF	136
	C2	12-2	WF	136

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B	9	MWF	65	

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. A	10	MF	65
	Lec. B	1	MF	65
	Lab. A	8-11	Tu	63 & 71
	Lab. B	8-11	Th	63 & 71
	Lab. C	2-5	Tu	63 & 71

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. A	11	TT	65
	Lec. B	3	MF	65
	Lab. A	8-11	Tu	64
	Lab. B	2-5	Th	64

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 104 or 108, and Math. 142 or 143.

3 hours	F1	1	MW	123
		1-3	F	123

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- Military organization; military policy of the United States; evolution of warfare; weapons; leadership, drill and exercise of command. Students must register in the two hour theory course and in one drill period. Prerequisite: Approval of the Military Science department.

1 hour	Theory 1X	9	MW	230	Severns
	Theory 2X	9	TT	230	O'Neill
	Theory 3X	10	MW	230	Severns
	Theory 4X	10	TT	230	O'Neill
	Theory 5X	2	MW	230	Severns
	Theory 6X	2	TT	230	O'Neill
	Drill	9, 10, 11, F 1, 2, 3		Drill area	

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- Military organization; weapons; scouting and patrolling; explosives and demolitons; leadership, drill and exercise of command. Students must register in the

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- (Concluded). two hour theory course and in one drill period. Prerequisite: MS 101 and MS 102 or approval of the Military Science department.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	116	DeRoche
	Theory 2X	9	TT	116	DeRoche
	Theory 3X	2	MW	116	DeRoche
	Theory 4X	2	TT	116	DeRoche
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

Mil. Sci. 205. ADVANCED INFANTRY:- Organization; weapons; gunnery with Infantry weapons; leadership, drill and exercise of command. Students must register in four hour theory course and in one drill period. Prerequisite: MS 103 and MS 104; successful completion of Armed Forces Qualification Tests; Officer type physical examination; and approval of Military Science department.

3 hours	Theory X	12	MTWT	230	McNulty
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

Mil. Sci. 235. ADVANCED CORPS OF ENGINEERS:- Organization of engineer units; battalion staff procedures; engineer signal communication; advanced map reading; military bridging; leadership, drill and exercise of command. Students must register in four hour theory course and in one drill period. Prerequisite: MS 103 and MS 104; enrollment in engineering or allied curriculum; successful completion of Armed Forced Qualification Tests; Officer type physical examination and approval of Military Science department.

3 hours	Theory X	11	MTWT	230	Rollins
	Drill	9, 10, 11 1, 2, 3	F	Drill area	

MUSIC

University Band:- The study and performance of a variety of band literature with public appearances in the form of concerts, convocations, and selected University functions. Band instruments of most kinds are available for free use by students. Admission by consent of director.

No credit	*1	TT	354	Zahrt

*Rehearsals continue for part or all of the two o'clock hour for those who are able to arrange their schedules to permit this, but while attendance during the two o'clock period is desired, it is not required.

University Choir:- Rehearsal and public performances of standard choral works; training in sight singing. Admission by consent of director.

Credit	Section	Hours	Days	Room	Instructor
No credit	D1	11	MTT	354	Williams

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	96	Page
	H1	3	MWF	96	D. Morris
	Q1	12	MTT	96	Page
	S1	2	MTT	96	Page

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	D1	11	MWF	97	Page
	E1	12	MWF	16	D. Morris
	G1	2	MWF	13	D. Morris
	P1	11	TT	16	D. Morris
		12	Th	16	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

2 hours	P1	11	TT	96	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for the second, third, or fourth time should register for P.E.M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Strnad
	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	Rader
	F	1	MWF	Gym	Fordham

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hours	A	8	MWF	Gym	Kristufek

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B	9	MWF	Gym	Keyser
	C	10	MWF	Gym	Montcalm
	D1	11	MWF	Gym	Strnad
	D2	11	MWF	Gym	Frey
	E1	12	MWF	Gym	Versen
	E2	12	MWF	Gym	Mann
	F	1	MWF	Gym	L. Miller
	G	2	MWF	Gym	Rader
	H	3	MWF	Gym	L. Miller

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	C	10	MWF	Gym	Keyser
	D	11	MWF	Gym	Montcalm
	F	1	MWF	Gym	Frey
*Classes will meet for	G	2	MWF	Gym	Bedard
1½ hours.	MN	*9	TT	Gym	Montcalm
	NP	*10	TT	Gym	Frey
	QR	*12	TT	Gym	Kreidler

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	E	12	MWF	Gym	Kreidler
	PQ	*11	TT	Gym	Montcalm

*Classes will meet for 1½ hours.

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Kreidler
	D	11	MWF	Gym	Keyser
	E	12	MWF	Gym	Montcalm
*Classes will meet for	F	1	MWF	Gym	Montcalm
1½ hours.	G	2	MWF	Gym	Frey
	H	3	MWF	Gym	Bedard
	PQ	*11	TT	Gym	Bedard
	QR	*12	TT	Gym	Bedard

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Kristufek
	D	11	MWF	Gym	Berrafato
	E	12	MWF	Gym	Strnad
*Classes will meet for	F	1	MWF	Gym	Strnad
1½ hours.	G	2	MWF	Gym	Berrafato
	NP	*10	TT	Gym	Strnad
	QR	*12	TT	Gym	Kristufek
	ST	*2	TT	Gym	Kristufek

P. E. M. 118. WRESTLING:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	8	MWF	Gym	Mann
	B	9	MWF	Gym	Mann
	C	10	MWF	Gym	Mann
*Classes will meet for	D	11	MWF	Gym	Kristufek
1½ hours.	E	12	MWF	Gym	Ryan
	F	1	MWF	Gym	Ryan
	G	2	MWF	Gym	Ryan
	H	3	MWF	Gym	Berrafato
	LM	*8	TT	Gym	Ryan
	ST	*2	TT	Gym	Mann

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-

1 hour	H	3	MWF	Gym	Ryan
	MN	*9	TT	Gym	Strnad
	PQ	*11	TT	Gym	Kreidler

*Classes will meet for 1½ hours.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	A	8	MWF	Gym	Kreidler
	B	9	MWF	Gym	Kreidler
	C	10	MWF	Gym	Versen
*Classes will meet for	D	11	MWF	Gym	Versen
1½ hours.	E	12	MWF	Gym	Bedard
	EF	**12:40	MWF	Gym	L. Miller
	F	1	MWF	Gym	Bedard
**Class will start at	G	2	MWF	Gym	L. Miller
12:40 and end at 1:10.	H	3	MWF	Gym	Rader
	PQ	*11	TT	Gym	Frey
	QR	*12	TT	Gym	Berrafato

P. E. M. 129. VOLLEYBALL:-

1 hour	A	***8	MWF	Gym	Keyser
	B	***9	MWF	Gym	Kristufek
	LM	*8	TT	Gym	Strnad
*Classes will meet for	MN	*9	TT	Gym	Ryan
1½ hours.	NP	*10	TT	Gym	Versen
	PQ	*11	TT	Gym	Kristufek
	QR	*12	TT	Gym	Mann
***Adaptive ONLY.	ST	*2	TT	Gym	Berrafato

P. E. M. 130. BASKETBALL:-

1 hour	DE	**11	MWF	Gym	Rader
	H	3	MWF	Gym	Gedvilas

**Class will start at 11:40 and end at 12:10.

P. E. M. 132. ARCHERY:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	NP	*10	TT	Gym	Rader
	ST	*2	TT	Gym	Rader

*Classes will meet for 1½ hours.

P. E. M. 136. BADMINTON:-

1 hour	LM	*8	TT	Gym	Montcalm
	MN	*9	TT	Gym	Bedard
	NP	*10	TT	Gym	Fordham
	PQ	*11	TT	Gym	Ryan
	QR	*12	TT	Gym	Versen
	ST	*2	TT	Gym	L. Miller

P. E. M. 139. BACKYARD SPORTS:-

1 hour	C	10	MWF	Gym	Berrafato
	F	1	MWF	Gym	Berrafato

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

1 hour	NP	*10	TT	Gym	Kreidler
	PQ	*11	TT	Gym	Gedvilas
	QR	*12	TT	Gym	Rader

*Classes will meet for 1½ hours.

P. E. M. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in physical education.

2 hours	D	11	MWF		Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Gedvilas

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in physical education. (First eight weeks)

Credit	Section	Hours	Days	Room	Instructor
2 hours	A	8-10	MTWTF	Gym	Versen

P. E. M. 155. GYMNASTICS:- For students majoring in physical education. (First eight weeks)

2 hours	A	8-10	MTWTF	Gym	Frey

P. E. M. 156. TRACK AND FIELD:- For students majoring in physical education. (Second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Fordham

Rec. 174. CAMP COUNSELING:- For students majoring in physical education.

3 hours	E	12	MWF		Gedvilas

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

1 hour	A	8	MWF	Audit.	Moldenhauer
	B	9	MWF	Audit.	Moldenhauer
	C	10	MWF	Audit.	Moldenhauer
*Classes will meet for	D	11	MWF	Audit.	Moldenhauer
1½ hours.	*NP	10	TT	Audit.	Pesavento
	PQ	11	TT	Audit.	Pesavento
	QR1	12	TT	Audit.	Pesavento
	QR2	12	TT	Audit.	Moldenhauer
	ST	2	TT	Audit.	Pesavento

P. E. W. 102. MODIFIED ACTIVITIES:- Prerequisite: Recommendation from Health Service.

1 hour	F	1	MWF	Audit.	N. Richardson

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	A	8	MWF	Audit.	Lazar
	B	9	MWF	Audit.	Lazar
	C	10	MWF	Audit.	Lazar
*Classes will meet for	D	11	MWF	Audit.	Lazar
1½ hours.	*NP	10	TT	Audit.	Lazar
	PQ	11	TT	Audit.	Lazar

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P. E. W. 105 or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
1 hour	*ST	2	TT	Audit.	Lazar

*Classes will meet for 1½ hours.

P. E. W. 123. BASKETBALL:-

1 hour	*LM	8	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:-

1 hour	H	3	MWF	Audit.	N. Richardson
	*MN	9	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 130. BADMINTON:- Students to furnish personal equipment.

1 hour	E	12	MWF	Audit.	N. Richardson

P. E. W. 135. ARCHERY:- (Supplemented by Varied Sports) Students to furnish personal equipment.

1 hour	*NP	10	TT	Audit.	N. Richardson

*Classes will meet for 1½ hours.

P. E. W. 140. BOATING & FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish boats, canoes, life jackets, etc.

1 hour	*PQ	11	TT	Audit.	Moldenhauer

*Classes will meet for 1½ hours.

P. E. W. 141. STUNTS AND TUMBLING:-

1 hour	F	2	MWF	Audit.	N. Richardson

P. E. W. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Moldenhauer

P. E. W. 144. FOLK DANCING:-

P. E. W. 144. FOLK DANCING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	E	12	MWF	Audit.	Barton

PHYSICAL SCIENCE

Physical Science 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and coordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and D. G. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. N	10	TT	204	Meloy
	Lab. 1	9-12	M	85	Meloy
	Quiz 1	10	W	80	Meloy
	Lab. 2	1-4	M	85	R. Miller
	Quiz 2	10	F	80	R. Miller
	Lab. 3	1-4	W	85	R. Miller
	Quiz 3	1	F	80	R. Miller
	Lab. 4	1-4	F	85	Meloy
	Quiz 4	2	W	80	Meloy
	Lab. 5	2-5	Tu	85	Cowin
	Quiz 5	3	F	80	Cowin
	Lab. 6	2-5	Th	85	Cowin
	Quiz 6	10	M	76	Cowin

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT AND SOUND):- Prerequisite: Math. 114 or 117.

5 hours	Lec. X	11	Tu	127	
	Quiz A1	8	MWF	134	Silkett
	Lab. A	8-11	Tu	117-122	Silkett
*For architecture students only.	Quiz B1	9	MWF	134	Silkett
	Lab. B	8-11	Th	117-122	Silkett
	Quiz D1	11	MWF	134	Livermore
	Lab. D	3-6	Tu	117-122	Livermore
	*Quiz F1	1	MWF	134	Snyder
	Lab. F	3-6	F	117-122	Snyder
	Quiz H1	3	MWF	134	Livermore
	Lab. H	3-6	Th	117-122	Livermore

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS:- Prerequisite: Physics 101.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. X	11	Th	127	
	Quiz D1	11	MWF	144	Johnson
	Lab. D	3-6	Th	124-122	Johnson
	Quiz G1	2	MWF	134	Johnson
	Lab. G	3-6	Tu	124-122	Johnson

Physics 105. NURSES' PHYSICS:- Prerequisite: Sophomore standing or consent of instructor.

4 hours	Quiz D1	11	MWTF	123	Silkett

Physics 106. GENERAL PHYSICS (MECHANICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Math. 132, 133, or 137.

4 hours	Lec. X	11	M	127	
	Lec. Y	2	M	127	
	Quiz C1	10	WF	134	Price
	Lab. C	3-6	W	117	Price
	Quiz L1	8	TT	134	Snyder
	Lab. L	8-11	M	117	Snyder
	Quiz P1	11	TT	134	Skadeland
	Lab. P1	8-11	F	117	Skadeland
	Quiz Q1	12	TT	134	Railsback
	Lab. Q2	12-3	M	117	Railsback
	Quiz S1	2	TT	144	
	Lab. S1	3-6	M	117	
	Quiz S2	2	TT	134	Skadeland
	Lab. S2	8-11	W	117	Skadeland
	Quiz T1	3	TT	134	Anderson
	Lab. T	12-3	F	117	Anderson

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS): - For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106, Math. 142 or 143 or concurrent registration therein.

4 hours	Lec. X	11	W	127	
	Lec. Y	2	W	127	
	Quiz L1	8	TT	144	McNeil
	Lab. L	8-11	M	124	McNeil
	Quiz M1	9	TT	134	Minkler
	Lab. M	3-6	W	124	Minkler
	Quiz P1	11	TT	144	Anderson
	Lab. P1	8-11	F	124	Anderson
	Quiz P2	11	TT	113	Minkler
	Lab. P2	12-3	M	124	Minkler
	Quiz S1	2	TT	123	Moulton

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. S1	8-11	W	124	Snyder
	Quiz S2	2	TT	113	Kromhout
	Lab. S2	12-3	W	124	Minkler

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106, Math. 142, or Math. 143, or concurrent registration therein.

4 hours	Lec. X	11	F	127	
	Quiz P1	11	TT	123	McNeil
	Lab. P	3-6	W	122	McNeil

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: Physics 106 and 107, Math. 142 or Math. 143.

4 hours	Quiz G1	2	MWF	207	Moulton
	Lab. G	3-6	Th	207	Kromhout

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the students with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	B1	9	MWF	82	Gabis
	S1	2	MTT	94	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	82	Gabis
	M1	9	MTT	94	Barber
	N1	10	MTT	97	Barber
	S1	2	TT	24	Gabis
		3	Th	24	Gabis
	T1	3	MTT	94	Barber
	U1	3	Tu	97	Gabis
		4	TT	97	Gabis

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcements; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150, or consent of the department.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	F1	1	MWF	97	Gabis

[1]Students may not receive credit for both Political Science 151 and 101 and 102.

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Sophomore standing.

4 hours	Lec. E1	9	WF	218	Heilman
	Quiz C1	10	WF	97	Heilman
	Quiz G1	2	WF	96	Sanderson
	Quiz M1	9	TT	96	Sanderson
	Quiz N1	10	TT	96	Heilman
	Quiz P1	11	TT	97	Heilman
	Lec. P1	11	TT	218	Lipman
	Quiz D1	11	WF	20	Howard
	Quiz E1	12	WF	14	Howard
	Quiz G2	2	WF	82	Howard
	Quiz H1	3	WF	94	Rosenbaum
	Quiz S1	2	TT	229	Kell

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or its equivalent, or junior standing.

4 hours	Lec. C1	10	WF	218	Lipman
	Quiz E1	12	WF	82	Heilman
	Quiz M1	9	TT	82	Heilman
	Quiz N1	10	TT	23	Lipman

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:- Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Econ. 170 or Math. 161. Prerequisite: Psych. 100, 103, or 106.

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	97	Feinstein

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination.

No credit	A1	8	MWF	201	Timmis
	B1	9	MWF	201	Hegie
	C1	10	MWF	201	Mackin
*Admission by consent of Division of Humanities.	C2	10	MWF	202	Timmis
	D1	11	MWF	201	Hegie
	E1	12	MWF	201	Kenny
	*E2	12	MTWTF	202	Kirstein
	F1	1	MWF	201	Timmis
	G1	2	MWF	201	Kenny
	*G2	2	MTWTF	202	Kirstein
	G3	2	MWF	203	Hegie
	H1	3	MWF	201	Kenny
	J1	4	MWF	201	Kenny
	M1	9	MTT	202	S. Miller
	N1	10	MTT	203	
	N2	10	MTT	209	Carlson
	P1	11	MTT	202	S. Miller
	Q1	12	MTT	203	Carlson
	S1	2	MTT	209	S. Miller

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

3 hours[1]	A1	8	MWF	202	Stronks
	A2	8	MWF	203	I. Miller
[1] Students with 95 or more credit hours receive only 2 hours credit.	B1	9	MWF	203	Greenwald
	B2	9	MWF	205	Brown
	B3	9	MWF	206	Willett
	B4	9	MWF	209	Vest
	B5	9	MWF	214	Love
	B6	9	MWF	215	I. Miller

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	C1	10	MWF	205	Brown
	C2	10	MWF	211	Greenwald
	C3	10	MWF	214	Willett
	D1	11	MWF	206	Greenwald
	D2	11	MWF	215	Brown
	D3	11	MWF	216	
	D4	11	MWF	212	Waller
	E1	12	MWF	205	Matlaw
	E2	12	MWF	206	Kerwick
	E3	12	MWF	216	Love
	E4	12	M	215	Waller
			WF	203	
	E5	12	M	220	Hipple
			WF	212	
	F1	1	MWF	202	Crumley
	F2	1	MWF	203	
	F3	1	MWF	206	Hegie
	F4	1	MWF	209	Love
	F5	1	MWF	211	Karanikas
	F6	1	MWF	214	I. Miller
	F7	1	MWF	220	Willett
	F8	1	MWF	221	Blum
	F9	1	MWF	222	Hipple
	F10	1	MWF	224	Greenwald
	F11	1	MWF	225	Niederman
	G1	2	MWF	205	
	G2	2	MWF	211	Blum
	G3	2	MWF	214	Crumley
	H1	3	MWF	202	
	H2	3	MWF	203	Karanikas
	H3	3	MWF	205	Crumley
	H4	3	MWF	206	Matlaw
	H5	3	MWF	209	Kirstein
	H6	3	MWF	228	Kerwick
	J1	4	MWF	202	Waller
	J2	4	MWF	203	Karanikas
	J3	4	MWF	205	Kerwick
	J4	4	MWF	206	Matlaw
	J5	4	MWF	209	Kirstein
	J6	4	MWF	215	Blum
	L1	8	MTT	205	Atwood
	M1	9	MTT	216	Nicholas
	M2	9	M	220	
			TT	201	
	M3	9	M	221	
			TT	203	
	N1	10	M	225	Atwood
			TT	201	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	N2	10	M	226	Nicholas
			TT	202	
	N3	10	M	227	Jackman
			TT	205	
	N4	10	M	228	
			TT	211	
	P1	11	M	224	Leonhard
			TT	201	
	P2	11	M	226	Gallagher
			TT	206	
	P3	11	M	227	Richey
			TT	209	
	P4	11	M	228	
			TT	211	
	Q1	12	M	221	Fryer
			TT	201	
	Q2	12	M	222	Atwood
			TT	205	
	Q3	12	M	223	Richey
			TT	206	
	Q4	12	M	228	
			TT	211	
	S1	2	M	222	Nicholas
			TT	201	
	S2	2	M	223	Cassell
			TT	203	
	S3	2	M	225	Freyer
			TT	205	
	S4	2	M	226	Richey
			TT	214	
	S5	2	MTT	216	
	T1	3	MTT	212	Freyer
	T2	3	MTT	214	Cassell
	T3	3	MTT	215	Richey
	U1	4	MTT	211	Freyer

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written English. Prerequisite: Rhetoric 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	206	Mackin
	B1	9	M	223	Mackin
			WF	202	
	B2	9	M	224	Timmis
			WF	212	
	B3	9	M	225	Wright
			WF	227	
	C1	10	MWF	216	Niederman
	C2	10	M	221	Wright

[1] Students with 95 or more credit hours receive only 2 hours credit.

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Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
			WF	203	
	D1	11	M	221	Niederman
			WF	202	
	D2	11	M	222	F. Johnson
			WF	203	
	E1	12	MWF	28	J. Johnson
	F1	1	MWF	215	Lease
	F2	1	MWF	216	Mackin
	G1	2	M	228	Kogan
			WF	209	
	H1	3	MWF	211	Hipple
	H2	3	MWF	223	J. Johnson
	J1	4	MWF	212	Kogan
	J2	4	MWF	214	J. Johnson
	J3	4	MWF	216	Hipple
	M1	9	M	226	Gallagher
			TT	206	
	N1	10	M	222	Gallagher
			TT	215	
	P1	11	M	223	Cassell
			TT	216	
	Q1	12	M	226	Cassell
			TT	209	
	S1	2	M	221	Carlson
			TT	211	
	T1	3	MTT	216	Carlson

Rhet. 133. EXPOSITORY WRITING:- Prerequisite: Rhetoric 101 and 102; sophomore standing.

3 hours	F1	1	MWF	226	F. Johnson

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

3 hours	C1	10	MWF	28	Oleksy
	D1	11	MWF	28	Oleksy
	F1	1	MWF	28	Oleksy
	G1	2	MWF	28	Oleksy
	N1	10	MTT	206	Leonhard
	S1	2	MTT	206	Leonhard

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- (Concluded). the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. S1	2	TT	218	Corley
	Quiz G1	2	WF	20	Endelman
	Quiz H1	3	MW	17	Endelman
[1]Students with 95	Quiz N1	10	TT	21	Corley
or more credit hours	Quiz P1	11	TT	21	Endelman
receive only 3 hours	Quiz T1	3	TT	22	Endelman
credit.					

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registrations, in Political Science 150 or 151 or History 151 or 152.

4 hours[1]	Lec. B1	9	M	218	Bill
	Quiz F1	1	MWF	82	Bill
	Quiz L1	8	TTF	16	Bill
[1]Students with 95	Quiz Q1	12	MTT	94	Riddle
or more credit hours	Quiz S1	2	MTT	82	S. Jones
receive only 3 hours credit.					

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

4 hours[1]	Lec. F1	1	M	218	Colby
	Quiz M1	9	TTF	14	Colby
	Quiz N1	10	TTF	14	Colby
[1]Students with 95	Quiz T1	3	MTT	14	Colby
or more credit hours receive only 3 hours credit.					

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. F1	1	WF	218	Klassen, others
	Quiz B1	9	WF	21	Lipman

Soc. Sci. 116. FAMILY LIVING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz N1	10	TT	20	Klassen

SOCIOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- Concerned with the scientific study of human societies. Prerequisite: Sophomore standing.

3 hours	C1	10	MW	14	Klassen
		10	F	16	Klassen
	D1	11	MWF	82	Klassen
	F1	1	MWF	94	Endelman
	H1	3	MWF	82	Corley

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

3 hours	D1	11	MWF	94	Endelman

Sociol. 140. SOCIAL CONTROL:- Prerequisite: Sociology 100.

3 hours	P1	11	TT	17	Klassen
		12	Th	17	Klassen

ANTHROPOLOGY

Anthrop. 102. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology.

3 hours	D1	11	MWF	96	Corley
	P1	11	TT	23	Corley
		12	Th	23	Corley

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

Spanish 101. ELEMENTARY SPANISH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	225	Patlogan
	C1	10	TWTF	227	Marsh
	D1	11	TWTF	227	Patlogan
	G1	2	TWTF	225	Marsh
	J1	4	TWTF	225	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Prerequisite: Spanish 101, or one year of high school Spanish.

4 hours[1]	B1	9	TT	215	Patlogan
			WF	216	
	H1	3	TWTF	225	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102, or two years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	D1	11	TWTF	226	Marsh
	E1	12	TWTF	227	Marsh

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103, or three years of high school Spanish.

4 hours	C1	10	TWTF	225	Sanchez
	E1	12	TWTF	225	Patlogan

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102, or two years of high school Spanish.

2 hours	P1	11	TT	225	Sanchez

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104, or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialect, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

Credit	Section	Hours	Days	Room	Instructor
No credit					
Sept. 28 - Nov. 11	P1	11	TT	217	
Nov. 16 - Jan. 13	P2	11	TT	217	
Sept. 28 - Nov. 11	T1	3	TT	217	
Nov. 16 - Jan. 13	T2	3	TT	217	

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

3 hours[1]	B1	9	MWF	217	Pitt
	B2	9	MWF	219	Hovde
	C1	10	MWF	215	Pitt
[1]Students with 95	C2	10	MWF	219	Hovde
or more credit hours	D1	11	MWF	217	Pitt
receive only 2 hours	D2	11	MWF	219	Crews
credit.	E1	12	MWF	214	
	E2	12	MWF	219	Hovde
	F1	1	MWF	217	
	F2	1	MWF	219	Crews
	G1	2	MWF	217	Thompson
	G2	2	MWF	219	
	H1	3	MWF	217	Thompson
	H2	3	MWF	219	Rudin
	J1	4	MWF	217	
	J2	4	MWF	219	Rudin
	N1	10	M	220	Goulson
			TT	219	
	P1	11	M	220	Goulson
			TT	219	
	S1	2	M	220	Hovde
			TT	217	
	U1	4	M	220	Crews
			TT	219	

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice.

2 hours[1]	C1	10	MWF	217	Rigler
	G1	2	MWF	215	Crews

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	Q1	12	TT	217	Hovde

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	N1	10	TT	217	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretations, analysis, and oral reading of prose literature and verse.

2 hours[1]	M1	9	TT	219	Goulson
	S1	2	TT	219	
	T1	3	TT	219	Crews

[1]Students with 95 or more credit hours receive only 1 hour credit.

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 142 or 147.

2 hours	Q1	12	TT	144
	U1	4	TT	113

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142 or 147.

4 hours	C1	10	MTWF	113

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142.

5 hours	B1	9	MTWTF	113
	E1	12	MTWTF	113

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 122 or 127. For architecture students only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	J1	4	MWF	113	

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T. A. M. 150.

3 hours	H1	3	MWF	113	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T. A. M. 150 or T. A. M. 154 or T. A. M. 156.

3 hours	C1	10	MWF	123	

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T. A. M. 221.

1 hour	C	8-10	F	61	

IDEN. NUMBER_____

Name in full.....
[Print] [Last name first; then given names]

Address.....
(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____

Date.....

College.....

Curriculum.....

Examiner and Recorder's Stamp Here

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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TIME TABLE

First Semester, 1955-56

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
NAVY PIER

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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 3
Calendar, First Semester, 1955-56..... 4
First Semester Registration Schedule..... 5
Legend for Section Letters..... 5
Chicago Undergraduate Division Calendar, 1955-56..... 6
Urbana Calendar..... 7
Accountancy..... 8
Anthropology..... 55
Architecture..... 9,10
Art..... 10,11
Biological Sciences..... 11,14
Business Law..... 14
Chemistry..... 14-19
Civil Engineering..... 19
Economics..... 20,21
Education..... 21
Electrical Engineering..... 22
English..... 22-24
French..... 24,25
General Engineering..... 25,26
Geography..... 26,27
Geology..... 27,28
German..... 28,29
History..... 29,30
Humanities..... 30,31
Hygiene..... 31,32
Management..... 32
Marketing..... 32
Mathematics..... 33-37
Mechanical Engineering..... 37
Military Science and Tactics..... 37,38
Music..... 38,39
Philosophy..... 39
Physical Education for Men..... 39-43
Physical Education for Women..... 43-45
Physical Sciences..... 45,46
Physics..... 46-48
Political Science..... 48,49
Psychology..... 49,50
Rhetoric..... 50-54
Social Sciences..... 54,55
Spanish..... 56
Speech..... 57,58
Theoretical and Applied Mechanics..... 58,59

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PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester 1955-56

FORMER STUDENTS ONLY

PLACE:
Liberal Arts and Sciences..... Room 29
Commerce..... Room 27
Engineering..... Room 184

A - E	Monday	September 12	1 - 4 p.m.
F - K	Tuesday	September 13	9 - 12 noon
L - Q	Tuesday	September 13	1 - 4 p.m.
R - Z	Wednesday	September 14	9 - 12 noon

Physical Education

No pre-advisement is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

First Semester, Fall 1955

Tues., Sept. 6 - Wed., Sept. 14	Orientation Period
Thurs., Sept. 15 - Sat., Sept. 17	Registration (Students registering for less than 12 hours report at 9:00 a.m., Sat., Sept. 17 for registration.)
Mon., Sept. 19	Instruction Begins
Wed., Sept. 21, 1:00 p.m.	Earliest time at which program changes may be made.
Mon., Sept. 26, 4:00 p.m.	Latest date for changes of study-lists without fee.
Fri., Sept. 30, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Nov. 4, 4:00 p.m.	The complotion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 11, 12:00 noon	Mid-semester grades due.
Fri., Nov. 11, 4:00 p.m.	Latest date of withdrawals for rebate of one-half fees.
Wed., Nov. 23, 6:00 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 28, 8:00 a.m.	Thanksgiving Vacation Ends
Sat., Dec. 3	Illinois Day (State admitted to Union, 1818) (Not a holiday)
Fri., Dec. 9, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals.
Wed., Dec. 7, 4:00 p.m.	Students withdrawing on or after this date must petition for readmission.
Fri., Dec. 16, 6:00 p.m.	Christmas Vacation Begins
Tues., Jan. 3, 8:00 a.m.	Christmas Vacation Ends
Fri., Jan. 20 - Sat., Jan. 28	Semester Examinations
Mon., Jan. 30, 10:00 a.m.	General Educational Development Tests, College Level, Room 300. (For all veterans who entered the Fall Semester 1955, as beginning freshmen.)

FIRST SEMESTER REGISTRATION SCHEDULE

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 12 noon, Saturday, September 17, 1955, will be assessed a late registration fee of $5.00.

A - Don	Thursday, September 15	11 a.m.
Doo - Joh	Thursday, September 15	1 p.m.
Joi - Mas	Thursday, September 15	9 a.m.
Mat - Ral	Thursday, September 15	2 p.m.
Ram - Thy	Thursday, September 15	10 a.m.
Thz - Z	Thursday, September 15	3 p.m.

NEW STUDENTS

A - Chy	Friday, September 16	11 a.m.
Chz - Fy	Friday, September 16	3 p.m.
Fz - Kal	Saturday, September 17	9 a.m.
Kam - Mil	Friday, September 16	10 a.m.
Mim - Ric	Friday, September 16	2 p.m.
Rid - Sti	Friday, September 16	1 p.m.
Stj - Z	Friday, September 16	9 a.m.

Students registering for less than 12 semester hours will register 9:00 a.m., Saturday, September 17.

LEGEND FOR SECTION LETTERS*

5, 4, and 3 hour

Hour	courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, and Engineering Sciences.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1955-56

First Semester (Fall, 1955)

Wed., Sept. 7 - Wed., Sept. 14	Orientation Period
Thurs., Sept. 15 - Sat., Sept. 17	Registration
Mon., Sept. 19	Instruction Begins
Wed., Nov. 23, 6 p.m.	Thanksgiving Vacation begins
Mon., Nov. 28, 8 a.m.	Thanksgiving Vacation ends
Sat., Dec. 3	Illinois Day (State admitted to the Union, 1818) (Not a holiday)
Fri., Dec. 16, 6 p.m.	Christmas Vacation begins
Tues., Jan. 3, 8 a.m.	Christmas Vacation ends
Fri., Jan. 20 - Sat., Jan. 28	Semester Examinations

Second Semester (Spring 1956)

Sat., Feb. 4 - Wed., Feb. 8	Orientation Period
Thurs., Feb. 9 - Sat., Feb. 11	Registration
Mon., Feb. 13	Instruction Begins
Fri., Mar. 2	University Day (University opened 1868) (Not a holiday)
Thurs., Mar. 29, 6 p.m.	Easter Vacation begins
Wed., Apr. 4, 8 a.m.	Easter Vacation ends
Fri., Apr. 27	Honors Day
Wed., May 30	Memorial Day
Mon., June 4 - Tues., June 12	Semester Examinations

Summer Session - 1956

Fri., June 22 - Sat., June 23	Registration
Mon., June 25	Instruction Begins
Wed., July 4	Independence Day
Tues., Aug. 17 - Wed., Aug. 18	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1955-56

First Semester (Fall 1955)

Tues., Sept. 6 - Fri., Sept. 9	Entrance Examinations
Mon., Sept. 12 - Sat., Sept. 17	Freshman week and registration
Mon., Sept. 19	Instruction Begins
Wed., Nov. 23, 1 p.m.	Thanksgiving Vacation begins
Mon., Nov. 28, 1 p.m.	Thanksgiving Vacation ends
Sat., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Wed., Dec. 21, 1 p.m.	Christmas Vacation begins
Tues., Jan. 3, 1 p.m.	Christmas Vacation ends
Thurs., Jan. 19	Study Day, classes dismissed
Fri., Jan. 20 - Sat., Jan. 28	Semester Examinations

Second Semester (Spring 1956)

Tues., Jan. 31 - Fri., Feb. 3	Entrance Examinations
Mon., Feb. 6 - Wed., Feb. 8	Registration
Thurs., Feb. 9	Instruction Begins
Fri., Mar. 2	University Day (University opened, 1868)
Thurs., Mar. 29, 1 p.m.	Easter Vacation begins
Wed., Apr. 4, 1 p.m.	Easter Vacation ends
Fri., May 4	Honors Day (Classes dismissed at noon)
Wed., May 30	Memorial Day
Thurs., May 31 - Fri., June 8	Semester Examinations
Sat., June 16	Commencement Exercises

Summer Session 1956

Tues., June 5 - Fri., June 8	Entrance Examinations
Mon., June 18	Registration
Tues., June 19	Instruction Begins
Wed., July 4	Independence Day
Fri., Aug. 10 - Sat., Aug. 11	Summer Session Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	16	Eggebrecht
	C1	10	MWF	16	Eggebrecht
	D1	11	MWF	22	Schneider
[1]Students with 95	E1	12	MWF	24	Fox
or more credit hours	F1	1	MWF	21	Schneider
receive only 2 hours	F2	1	MWF	22	Kabbes
credit.	G1	2	MWF	21	Schneider
	G2	2	MWF	20	Graff
	H1	3	MWF	18	Eggebrecht
	H2	3	MWF	22	Yankow
	J1	4	MWF	22	Yankow
	M1	9	MTT	23	Kabbes
	N1	10	MTT	23	Kabbes
	P1	11	MTT	16	Morici
	Q1	12	MTT	16	Morici
	S1	2	MTT	24	Fox
	T1	3	MTT	24	Fox
	T2	3	MTT	19	Ross
	U1	4	MTT	19	Ross

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101. Prerequisite: Accy. 101.

3 hours[1]	C1	10	MWF	20	Graff
	D1	11	MWF	17	Graff
	F1	1	MWF	17	Graff
[1]Students with 95	T1	3	MTT	16	Morici
or more credit hours	U1	4	MTT	16	Morici
receive only 2 hours					
credit.					

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	B1	9	MWF	22	Yankow
	D1	11	MWF	21	Yankow
	F1	1	MWF	23	Eggebrecht
	N1	10	MTT	25	Ross
	Q1	12	MTT	17	Ross

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	C1	10	MWF	22	Schneider
	E1	12	MWF	22	Kabbes

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	12	W	251	
	Lab. A	8-10	MWF	241	
	Lab. C	1-3	MWF	241	
	Lab. D	3-5	MWF	241	

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. D	11	MF	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 131 or sophomore standing.

3 hours	Lec.	1	W	251
	Lab. B	8-11	MF	241
		10-12	W	241
	Lab. D	1-4	MF	241
		2-4	W	241
	Lab. F	8-11	TT	241
		8-10	W	241
	Lab. G	2-5	TT	241
		4-6	W	241

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

3 hours	Lec.	2	W	251
	Lab. A	8-11	MF	242
		8-10	W	242
	Lab. B	2-5	MF	242
		3-5	W	242

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing, principles of plan, elevation and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	8-11	MWF	242

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lec. P	11	TT	251	

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lec. S	2	TT	251	

ART

Art. 111. SURVEY OF ART HISTORY:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	H1	3	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	B1	9	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture.

2 hours	Lab. A	8-10	MWF	83
	Lab. B	10-12	MWF	83
	Lab. C	12-2	MWF	83
	Lab. D	2-4	MWF	83
	Lab. F	8-11	TT	83
	Lab. G	2-5	TT	83

Art 182. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 181.

2 hours	Lab. A	8-11	MF	84
	Lab. B	12-3	MF	84
	Lab. F	9-12	TT	84

Art 183. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 182.

Art 183. FREEHAND DRAWING:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lab. A	8-11	MF	91	
	Lab. C	3-6	MF	91	
	Lab. F	8-11	TT	91	
	Lab. G	2-5	TT	91	

Art 184. FREEHAND DRAWING:- Primarily for students in architecture and landscape architecture. Prerequisite: Art 183.

2 hours	Lab. B	12-3	MF	91	
	Lab. G	3-6	TT	84	

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz. Students registering in Lec. Q1 may take laboratory sections 1 through 7 only. Students registering in Lec. F1 may take laboratory sections 8 through 14 only. Students registering in Lec. S1 may take laboratory sections 15 through 21 only. Students registering in Lec. B1 may take laboratory sections 22 through 27 only.

4 hours[1]	Lec. Q1	12	TT	218	Pickett
	Lab. 1	8-10	WF	46	Presley
	Quiz 1	9	M	46	Presley
	Lab. 2	8-10	TT	46	Yokoyama
	Quiz 2	8	M	46	Yokoyama
	Lab. 3	10-12	TT	46	Yokoyama
	Quiz 3	10	M	46	Yokoyama
	Lab. 4	12-2	WF	46	Holden
	Quiz 4	1	M	46	Holden
	Lab. 5	2-4	WF	46	Spirakis
	Quiz 5	3	M	46	Spirakis
	Lab. 6	2-4	TT	46	Pickett
	Quiz 6	12	M	45	Pickett
	Lab. 7	4-6	TT	46	Spirakis
	Quiz 7	12	M	46	Spirakis
	Lec. F1	1	WF	210	Little
	Lab. 8	10-12	WF	46	Presley
	Quiz 8	11	M	46	Presley
	Lab. 9	4-6	WF	46	Holden
	Quiz 9	4	M	46	Holden
	Lab. 10	8-10	WF	48	McQuate
	Quiz 10	8	M	48	McQuate
	Lab. 11	8-10	TT	48	McQuate
	Quiz 11	9	M	48	McQuate

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 12	10-12	WF	48	Holden
	Quiz 12	11	M	48	Holden
	Lab. 13	2-4	WF	48	McQuate
	Quiz 13	3	M	48	McQuate
	Lab. 14	4-6	WF	48	Little
	Quiz 14	4	M	48	Little
	Lec. S1	2	TT	210	Presley
	Lab. 15	12-2	WF	48	McMillan
	Quiz 15	12	M	48	McMillan
	Lab. 16	4-6	TT	48	Presley
	Quiz 16	1	M	48	Presley
	Lab. 17	8-10	WF	45	Yokoyama
	Quiz 17	9	M	45	Yokoyama
	Lab. 18	10-12	TT	44	Holden
	Quiz 18	10	M	44	Holden
	Lab. 19	2-4	WF	44	W. J. Dembski
	Quiz 19	2	M	44	W. J. Dembski
	Lab. 20	4-6	WF	44	McMillan
	Quiz 20	4	M	44	McMillan
	Lab. 21	8-10	TT	44	Glassman
	Quiz 21	8	M	44	Glassman
	Lec. B1	9	WF	218	Glassman
	Lab. 22	10-12	WF	44	Glassman
	Quiz 22	11	M	44	Glassman
	Lab. 23	12-2	WF	44	Yokoyama
	Quiz 23	12	M	44	Yokoyama
	Lab. 24	4-6	TT	44	Little
	Quiz 24	1	M	44	Little
	Lab. 25	2-4	TT	48	Little
	Quiz 25	2	M	48	Little
	Lab. 26	8-10	TT	45	McMillan
	Quiz 26	8	M	45	McMillan
	Lab. 27	2-4	TT	45	Spirakis
	Quiz 27	2	M	46	Spirakis

Biology 102. FUNDAMENTALS OF BIOLOGY:- Application of biological principles to the living world. Lectures, laboratory, and quiz. Prerequisite: Biology 101. Credit will not be given for both Biological Sciences 102 and D.C.S. 132.

Lec. Q1	12	TT	210	Staff
Lab. 1	8-10	TT	43	Madison-Rouffa
Quiz 1	9	M	43	Madison-Rouffa
Lab. 2	10-12	WF	43	Madison
Quiz 2	11	M	43	Madison
Lab. 3	10-12	TT	43	Glassman-Williams
Quiz 3	10	M	43	Glassman-Williams

Biology 102. FUNDAMENTALS OF BIOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 4	12-2	WF	43	McQuate
	Quiz 4	12	M	43	McQuate
	Lec. E1	12	WF	210	Staff
	Lab. 5	2-4	WF	43	Rouffa
	Quiz 5	2	M	43	Rouffa
	Lab. 6	2-4	TT	43	McMillan
	Quiz 6	3	M	43	McMillan
	Lab. 7	4-6	TT	43	W. J. Dembski
	Quiz 7	1	M	43	W. J. Dembski
	Lab. 8	4-6	WF	43	W. J. Dembski
	Quiz 8	4	M	43	W. J. Dembski

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogentic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. F1	1	WF	218	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
	Quiz 1	10	M	48	Rouffa

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. N1	10	TT	65	Madison
	Lab. 1	8-10	WF	43	Madison
	Quiz 1	8	M	43	Madison

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. H1	3	WF	210	Williams

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 131. GENERAL ZOOLOGY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 1	2-4	TT	44	Williams
	Quiz 1	3	M	44	Williams
	Lab. 2	8-10	WF	44	Williams
	Quiz 2	9	M	44	Williams

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organ systems, their function and evolution. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. D1	11	MWF	210	Shank
	Lab. 1	10-1	TT	45	Sangster
	Lab. 2	2-4	MWF	45	Shank
	Lab. 3	4-6	MWF	45	Spirakis

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. G1	2	MWF	218	Sangster
	Lab. 1	10-12	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	D1	11	MWF	24	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

5 hours[1]	Lec. M	9	TT	204	Hunt

[1]Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 or more credit hours receive only 3 hours credit.

NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING.

Chem. 101. GENERAL CHEMISTRY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Lab. 1	8-10	MWF	53	Carbonaro
	Quiz 1	8	TT	80	Carbonaro
	Lab. 2	10-12	MWF	53	
	Quiz 2	10	TT	74	
	Lab. 3	12-2	MWF	53	Hunt-Cowin
	Quiz 3	12	TT	80	Hunt
	Lab. 4	2-4	MWF	53	
	Quiz 4	3	TT	76	
	Lab. 5	1-3	MWF	53	Questiaux
	Quiz 5	2	TT	80	Questiaux
	Lab. 6	3-5	MWF	53	Hunt
	Quiz 6	3	TT	80	Hunt
	Lab. 7	2-5	TT	53	Seabright
	Quiz 7	2	WF	75	Seabright
	Lab. 8	10-1	TT	53	Cowin
	Quiz 8	9	WF	80	Cowin

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	*Lec. C	10	WF	204	Mueller
	Lab. 11	10-12	M	53	Barker
[1]Students with 95 or more credit hours receive only 2 hours credit.	Quiz 11	11	TT	76	Barker
	Lab. 12	8-10	M	53	Barker
	Quiz 12	9	WF	76	Barker
	Lab. 13	12-2	M	53	Carbonaro
	Quiz 13	1	WF	74	Carbonaro
*NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING.	Lab. 14	2-4	Tu	53	Mansfield
	Quiz 14	2	WF	80	Mansfield
	Lab. 15	1-3	F	53	Barker
	Quiz 15	1	M	74	Barker
**FOR STUDENTS IN THE COLLEGE OF ENGINEERING.		1	W	75	
	**Lec. N	10	TT	204	Schrage
	Lab. 21	10-12	M	50	Schrage-Harris
	Quiz 21	10	WF	76	Schrage
	Lab. 22	8-10	Tu	50	Questiaux
	Quiz 22	12	WF	75	Questiaux
	Lab. 23	11-1	Tu	50	Carbonaro
	Quiz 23	12	WF	76	Carbonaro
	Lab. 24	2-4	M	50	Seabright
	Quiz 24	3	WF	76	Seabright
	Lab. 25	2-4	Th	50	Egbert-Cowin
	Quiz 25	10	WF	80	Egbert

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics 111 or 112.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. P	11	TT	204	Bachrach
	Lec. F	1	WF	204	Bachrach
	Lab. 28	8-10	MW	50	Perry
	Quiz 28	8	TT	76	Perry
	Lab. 29	10-12	MW	50	
	Quiz 29	10	TT	76	
	Lab. 30	12-2	MW	50	Perry
	Quiz 30	12	TT	76	Perry
	Lab. 31	2-4	MW	50	
	Quiz 31	2	TT	76	
	Lab. 32	4-6	MW	50	Savoy
	Quiz 32	4	TT	76	Savoy
	Lab. 33	8-10	TT	50	
	Quiz 33	9	WF	75	
	Lab. 34	10-12	TT	50	
	Quiz 34	11	MW	76	
	Lab. 35	2-4	TT	50	Bachrach
	Quiz 35	3	MW	75	Bachrach
	Lab. 36	3-5	TT	50	
	Quiz 36	4	MW	75	
	Lab. 37	9-11	TT	50	Perry
	Quiz 37	11	WF	80	Perry
	Lab. 38	1-3	MW	50	
	Quiz 38	12	TT	75	
	Lab. 39	11-1	TT	50	
	Quiz 39	11	WF	75	Bachrach

[1] Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chemistry 101, 102, or 103.

4 hours[1]	Lec. D	11	WF	204	Huitema
	Lab. 41	8-10	MW	50	Sackheim
	Quiz 41	9	TT	74	Sackheim
	Lab. 42	2-4	MW	50	Harris
	Quiz 42	11	TT	75	Harris
	Lab. 43	12-2	MW	50	Sackheim
	Quiz 43	12	TT	74	Sackheim
	Lab. 44	12-2	WF	50	Harris
	Quiz 44	2	TT	75	Harris
	Lab. 45	8-10	TT	50	Harris
	Quiz 45	10	WF	74	Harris
	Lab. 46	9-11	TT	50	Huitema
	Quiz 46	11	TT	74	Huitema
	Lab. 47	2-4	TT	50	Sackheim
	Quiz 47	3	MW	74	Sackheim

[1] Credit in Chem. 104 will not be granted to students who have received credit in Chem. 105 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 and 106. Prerequisite: Chemistry 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. T	3	TT	210	Stubblefield
	Lab. 51	8-10	MWF	53	Hedberg
[1]Credit in Chem. 105 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.	Quiz 51	8	TT	75	Hedberg
	Lab. 52	10-12	MWF	53	Stubblefield
	Quiz 52	10	TT	75	Stubblefield
	Lab. 53	2-4	MWF	53	Stubblefield-Miller
	Quiz 53	1	WF	80	Stubblefield

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. Prerequisite: Chemistry 101, 102, or 103.

5 hours[1]	Lec. Q	12	TT	65	Mueller
	Lab. 61	9-11	MWF	53	Seabright-Mueller
[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.	Quiz 61	12	WF	74	Seabright
	Lab. 62	2-5	TT	53	Mueller
	Quiz 62	2	MW	76	Mueller

Chem. 107. GENERAL CHEMISTRY:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

5 hours[1]	Lec. H	3	WF	204	Weldon
	Lab. 71	10-12	TT	53	Weldon-Carbonaro
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 71	10	MWF	75	Weldon
	Lab. 72	2-4	TT	53	Weldon
	Quiz 72	1	MWF	76	Weldon

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Pre-medical students requiring more

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- (Concluded)
than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry. Graduation from high school in the upper quarter of the high school class.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. G	2	MWF	204	Huitema
	Lab. 66	9-12	Th	50	Hedberg
	Quiz 66	1	MF	75	Hedberg
	Lab. 67	10-1	Tu	50	Hedberg
	Quiz 67	11	MW	74	Hedberg
	Lab. 68	2-5	Th	50	Barker
	Quiz 68	4	WF	74	Barker

[1] Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106.

5 hours	Lec. N	10	TT	210	Mansfield
	Lab. 76	9-12	MF	53	Mansfield
		9-11	W	53	Mansfield
	Quiz 76	9	TT	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. Prerequisite: Chemistry 104, 105, or 106.

5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	8-11	MWF	54	Gottlieb
	Quiz 81	8	Th	74	Gottlieb
	Lab. 82	12-3	MWF	54	Gottlieb
	Quiz 82	2	Tu	74	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in the Chemistry curriculum and Chemical Engineering. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. T	3	TT	204	Babler
	Lab. 86	9-12	MWF	54	Babler
	Quiz 86	3	F	74	Babler
	Lab. 87	2-5	MWF	54	Egbert
	Quiz 87	4	Th	75	Egbert

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chemistry 105 or 110.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M		
	Lab. 91	9-12	TT	52	Crum
	Quiz 91	9	M	74	Crum
	Lab. 92	1-4	WF	52	Crum
	Quiz 92	2	M	74	Crum
	Lab. 93	8-11	MW	52	Questiaux
	Quiz 93	9	F	74	Questiaux

Chem. 240. ELEMENTARY PHYSICAL CHEMISTRY:- Lectures and problems. Prerequisite: Chemistry 124; Physics 106, 107, and 108, or two semesters of general physics with concurrent registration in the third semester, or equivalent; Mathematics 132 or 137.

3 hours	Lec. G	2	MWF	210	Schrage

Chem. 241. ELEMENTARY PHYSICAL CHEMISTRY:- Laboratory to accompany Chemistry 240. Prerequisite: Credit or registration in Chemistry 240.

1 hour	Lab. 96	2-5	Tu	50A	Schrage

CIVIL ENGINEERING

C. E. 105. SURVEYING:- Prerequisite: G.E. 101 and Math. 123.

2 hours	Lec. M1	9	Th	63
	Lab. M	9-12	Tu	

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	F1	1	MWF	63

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

2 hours	Lab. B	10-12	MF	61 & 63
	Lab. G	2-4	TT	61 & 63

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	20	Williams
	D1	11	MWF	20	Williams
	F1	1	MWF	16	Williams
	G1	2	MWF	16	Williams
	T1	3	MTT	20	Geldard
	U1	4	MTT	20	Geldard

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	B1	9	MWF	24	Gillett
	C1	10	MWF	18	O. Miller
	F1	1	MWF	18	O. Miller
	G1	2	MWF	23	Gillett
	H1	3	MWF	25	Grampp
	J1	4	MWF	25	Grampp
	Q1	12	MTT	18	Larson
	S1	2	MTT	22	Larson

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102

3 hours	B1	9	MWF	18	O. Miller
	D1	11	MWF	23	Shaw
	F1	1	MWF	25	Shaw
	G1	2	MWF	18	O. Miller

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	D1	11	MWF	25	Dunne
	E1	12	MWF	19	Berg
	G1	2	MWF	25	Dunne
	H1	3	MWF	17	Berg
	M1	9	MTT	17	Larson
	N1	10	MTT	17	Larson

Econ. 136. AMERICAN ECONOMIC HISTORY:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. Open only to freshmen and sophomores.

3 hours	B1	9	MWF	25	Grampp
	C1	10	MWF	19	J. Morris
	D1	11	MWF	19	J. Morris

Econ. 136. AMERICAN ECONOMIC HISTORY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	D2	11	MWF	18	Geldard
	E1	12	MWF	25	Grampp
	F1	1	MWF	20	Knudson
	F2	1	MWF	19	Geldard
	G1	2	MWF	19	Jung
	H1	3	MWF	21	J. Morris
	J1	4	MWF	24	Jung
	M1	9	MTT	21	Knudson
	Q1	12	MTT	20	Knudson
	T1	3	MTT	23	Shaw
	U1	4	MTT	23	Shaw

Econ. 138. EUROPEAN ECONOMIC HISTORY:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open only to freshmen and sophomores.

3 hours	E1	12	MWF	21	Jung

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108. Sophomore standing. Commerce students are required to elect Econ. 170 and will not be allowed credit for Psych. 135 or Math. 161.

3 hours	B1	9	MW	33	Derrick
	Prac. I	9-11	F	33	Derrick
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	S1	2	TT	28	Ricks
	T1	3	TT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture and architectural engineering students only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D	11	MWF	123	

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Credit or registration in Physics 107 and Math. 143.

4 hours	Lec. C1	10	MWF	123	
	Lab. C	8-11	Tu	120	
	Lec. G1	2	MWF	123	
	Lab. G	2-5	Tu	120	

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for Engl. 101, 102, and 103 in addition to Engl. 121, 122, and 123. This course, plus Engl. 102 and 103, satisfies the humanities requirement in general education.

3 hours[1]	A1	8	MWF	215	I. Miller
	D1	11	MWF	215	F. Johnson
	H1	3	MWF	215	Brown
	M1	9	MTT	216	Stronks
	N1	10	MTT	214	Jackman
	T1	3	MTT	214	J. Johnson

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. See note under Engl. 101.

3 hours[1]	B1	9	MWF	211	Kogan
	D1	11	MWF	211	Love
	E1	12	MWF	216	Niederman
[1]Students with 95 or more credit hours receive only 2 hours credit.	J1	4	MWF	212	Richey
	N1	10	MTT	216	Nicholas
	S1	2	MTT	215	Matlaw

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoevski's CRIME AND PUNISHMENT, E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	M	224	Kerwick
			WF	216	
	C1	10	MWF	212	Freyer
	E1	12	MWF	214	Greenwald
	G1	2	MWF	212	Hipple
	L1	8	MTT	216	Leonhard
	P1	11	M	222	Gallagher
			TT	215	
	T1	3	MTT	216	Cassell

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 113. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers from 1620 to the Civil War. Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	A1	8	MWF	212	Wright
	Q1	12	MTT	212	Lease

Engl. 114. AMERICAN LITERATURE:- A survey of American literature with emphasis on representative works of the major writers from the Civil War to the present. Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	B1	9	MWF	212	Wright
	P1	11	MTT	212	Karanikas

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, RASSELAS. Note: Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not give for Engl. 121 in addition to Engl. 101, 102, and 103. This course, plus Engl. 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	F1	1	MWF	215	Atwood

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and one novel. See note under Engl. 121. Prerequisite: Sophomore standing or exemption from Rhet. 102.

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
3 hours	M1	9	MTT	215	S. Miller

Engl. 123. CHIEF MODERN ENGLISH WRITERS:- Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. See note under Engl. 121. Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	Q1	12	MTT	215	Waller

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	C1	10	MWF	215	Vest

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. No credit for graduation is given for French 101 without French 102.

4 hours[1]	A1	8	TWTF	226	Lenihan
	A2	8	TWTF	224	Skogen
	B1	9	TWTF	226	Lenihan
	C1	10	TWTF	224	Skogen
	D1	11	TWTF	226	Cowles
	E1	12	TWTF	224	Skogen
	E2	12	TWTF	228	Lein
	G1	2	TWTF	224	Cowles
	H1	3	TWTF	226	Lein
	J1	4	TWTF	226	Lein

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	B1	9	TWTF	224	Skogen
	E1	12	TWTF	226	Cowles
	H1	3	TWTF	224	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102, or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler

French 103. MODERN FRENCH:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	C1	10	TWTF	228	Schuyler
	G1	2	TWTF	228	Lein

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	A2	8-10	MWF	136
	B1	10-12	MWF	135
	B3	10-12	MWF	137
	B4	10-12	MWF	141
	C1	12-2	MWF	135
	C3	12-2	MWF	137
	C4	12-2	MWF	141
	D1	2-4	MWF	135
	D3	2-4	MWF	137
	E3	4-6	MWF	137
	E4	4-6	MWF	141
	F1	8-11	TT	135
	F3	8-11	TT	137
	F4	8-11	TT	141
	G1	2-5	TT	135

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane and solid geometry.

3 hours	A5	8-10	MWF	143
	B5	10-12	MWF	143
	C5	12-2	MWF	143
	D5	2-4	MWF	143
	E5	4-6	MWF	143
	F5	8-11	TT	143
	G4	2-5	TT	141
	G5	2-5	TT	143

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

Credit	Section	Hours	Days	Room	Instructor
2 hours	A6	8-10	MWF	145	
	B6	10-12	MWF	145	
	C6	12-2	MWF	145	
	D6	2-4	MWF	145	
	F6	8-11	TT	145	
	G6	2-5	TT	145	

G. E. 108. ARCHITECTURAL PROJECTIONS:- Continuation of G.E. 107. Prerequisite: G.E. 107.

2 hours	B7	10-12	MWF	146	
	F7	8-11	TT	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G.E. 101 and G.E. 102.

2 hours	C7	12-2	MWF	146	

G. E. 112. ADVANCED DRAFTING FOR MECHANICAL ENGINEERS:- Prerequisite: G.E. 101 and G.E. 102.

2 hours	B2	10-12	MWF	136	
	D2	2-4	MWF	136	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 satisfy the general education requirement in physical science; Geography 101 and 104 satisfy the general education requirement in social science, in the College of Liberal Arts and Sciences. Lectures, discussions and quiz.

5 hours[1]	Lec. M1	10	TT	218	Cutshall
	Quiz A1	8	MWF	13	Kusch
	Quiz C1	10	MWF	13	Kusch
[1]Students with 95 or more credit hours receive only 4 hours credit.	Quiz F1	1	MWF	13	Kusch
	Quiz S1	2	M	13	Cutshall
			TT	16	
	Quiz T1	3	MTu	13	Cutshall
			Th	14	
	Lec. C	10	WF	218	Finney
	Quiz E1	12	MWF	13	Finney
	Quiz F2	1	MWF	14	Finney

Geog. 101. ELEMENTS OF GEOGRAPHY:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Quiz M1	9	MTT	13	Finney
	Quiz N1	10	MTT	14	Finney

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geography 101 or consent of instructor.

3 hours[1]	M1	9	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Open to all students except those having credit in Geography 106.

3 hours[1]	Q1	12	M	14	Cutshall
			TT	13	

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geography 101, or consent of instructor.

3 hours	D1	11	MWF	13	Kusch
	S1	2	TT	13	Kusch
		3	Th	13	Kusch

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

4 hours[1]	Lec. S	2	TT	204	Karpinski
	Lab. 1	2-4	M	42	Krinsley
[1]Students with 95	Quiz 1	3	W	42	Krinsley
or more credit hours	Lab. 2	2-4	F	42	Kurs
receive only 3 hours	Quiz 2	2	W	42	Kurs
credit.	Lab. 3	8-10	Tu	42	Kurs
	Quiz 3	9	Th	42	Kurs
	Lab. 4	10-12	Th	42	Kurs
	Quiz 4	10	Tu	42	Kurs
	Lab. 5	11-1	F	42	Kurs
	Quiz 5	12	W	42	Kurs
	Lab. 6	11-1	Tu	42	Karpinski
	Quiz 6	12	Th	42	Karpinski

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 141.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. P	11	TT	210	Krinsley
	Lab. 11	11-1	M	42	Krinsley
	Quiz 11	11	W	42	Krinsley

[1]Students with 95 or more credit hours receive only 3 hours credit.

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: One semester of college chemistry.

3 hours	A	8-10	MWF	42 & 53	Kurs

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	C	10	MWF	42	Karpinski
	F	1	MWF	42	Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have offered for entrance high school credit in this language. No credit toward graduation is given for German 101 without 102.

4 hours[1]	A1	8	TWTF	220	Hartoch
	A2	8	TWTF	221	Fuller
	B1	9	TWTF	220	Kauf
[1]Students with 95	B2	9	TWTF	221	Braunfeld
or more credit hours	C1	10	TWTF	220	Hartoch
receive only 3 hours	C2	10	TWTF	221	Vardaman
credit.	D1	11	TWTF	220	Vardaman
	D2	11	TWTF	221	Teichmann
	E1	12	TWTF	220	Fuller
	E2	12	TWTF	221	Kauf
	G1	2	TWTF	220	Braunfeld
	H1	3	TWTF	220	Willner
	H2	3	TWTF	221	Teichmann
	J1	4	TWTF	220	Willner

German 102. ELEMENTARY COURSE:- Continuation of German 101. Oral practice, reading, and grammar. Prerequisite: German 101 or one year of high school German.

German 102. ELEMENTARY COURSE:- (Concluded)

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	222	Kauf
	B1	9	TWTF	222	Hartoch
	D1	11	TWTF	222	Braunfeld
	G1	2	TWTF	222	Willner

[1] Students with 95 or more credit hours receive only 3 hours credit.

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Fuller
	C1	10	TWTF	222	Braunfeld
	D1	11	TWTF	223	Fuller
	E1	12	TWTF	222	Hartoch
	G1	2	TWTF	221	Teichmann

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, three years of high school German, or equivalent.

4 hours	C1	10	TWTF	223	Kauf
	E1	12	TWTF	223	Willner

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102, or two years of high school German; concurrent registration in German 103 or 104.

2 hours	F1	1	WF	220	Teichmann

HISTORY

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION:- Europe from the age of the great discoveries to the close of the Napoleonic wars.

4 hours[1]	Lec. M1	9	TT	218	Unfer
	Quiz B1	9	WF	21	Unfer
[1] Students with 95	Quiz E1	12	WF	20	Unfer
or more credit hours	Quiz P1	11	TT	19	Unfer
receive only 3 hours	Quiz Q1	12	TT	19	Unfer
credit.	Quiz T1	3	TT	21	Unfer
	Lec. D1	11	WF	218	Nicholson

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz F1	1	WF	96	Nicholson
	Quiz G1	2	WF	94	Nicholson
	Quiz P2	11	TT	21	Nicholson
	Quiz Q2	12	TT	21	Nicholson

Hist. 131. HISTORY OF ENGLAND TO 1688: - A survey of the political and constitutional, social and economic, diplomatic and imperial history of the British people from the beginning of English history through the revolution of 1688. This course, plus History 132, satisfies the general education requirement in the humanities in the College of Liberal Arts and Sciences.

4 hours[1]	C1	10	TWTF	97	Bill
	G1	2	TWTF	97	Bill

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundations, the movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	Jones
	Quiz F1	1	MW	82	Jones
	Quiz M1	9	TT	82	Jones
	Quiz N1	10	TT	82	Jones

Hist. 152. HISTORY OF THE UNITED STATES, 1865-1955:- A century of national life and organization. Prerequisite: Sophomore standing. In the first semester this course is open only to students in a teacher education curriculum.

3 hours	S1	2	MTT	94	Jones

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

3 hours	S1	2	TT	18	Nicholson
		3	Th	18	Nicholson

HUMANITIES

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary

Humanities 101. VALUES IN LITERATURE:- (Concluded) types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course plus Humanities 102 satisfies the general education requirement in humanities.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	B1	9	TWTF	214	Blum
	D1	11	TWTF	214	Jordan
	G1	2	TWTF	214	Lease

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. Credit is not give for Humanities 151 in addition to English 101, 102, or 103. This course plus Humanities 152 satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	E1	12	TWTF	209	Vardaman
	G1	2	TWTF	223	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

2 hours[1]

[1]Students with 95 or more credit hours receive only 1 hour credit.

(For Women)			
N	10	TT	213
P	11	TT	213
C	10	WF	213
(For Men)			
A	8	MW	213
B	9	MW	213
E	12	MW	213
F	1	MW	213
G	2	MW	213
L	8	TT	213
M	9	TT	213
S	2	TT	213
T	3	TT	213
U	4	TT	213

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	(For Women)				
	D	11	WF	213	
[1]Students with 95	(For Men)				
or more credit hours	H	3	MW	213	
receive only 1 hour	J	4	MW	213	
credit.	Q	12	TT	213	

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours[1]	P	11	TT	Gym	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	C1	10	MWF	24	Gillett
	E1	12	MWF	23	Gillett
	F1	1	MWF	24	J. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	B1	9	MWF	19	Berg
	C1	10	MWF	21	Knudson
	O1	2	MWF	17	Berg

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry and statistics. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. Prerequisite: Math. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F1	1	MWF	105	Olsen

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MWF	105	
	A2	8	MTWTF	106	Ockert
	A3	8	MTWTF	110	
[1]Students having $1\frac{1}{2}$ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.	A4	8	MTWTF	111	Scholomiti
	B1	9	MWF	101	Nolan
	B2	9	MTWTF	106	
	B3	9	MTWTF	110	Feinstein
	B4	9	MTWTF	111	Ondrak
	C1	10	MWF	100	Olsen
	C2	10	MTWTF	106	Stelling
	C3	10	MTWTF	110	Hornacek
	D1	11	MTWTF	106	
	D2	11	MTWTF	110	Deniston
	E1	12	MTWTF	111	Curtis
	E2	12	MTWTF	106	
	E3	12	MTWTF	110	Berglund
	F1	1	MWF	106	
	F2	1	MWF	110	Ragland
	G1	2	MTWTF	106	Murphy
	G2	2	MTWTF	110	Pennisi
	H1	3	MTWTF	106	Alberti
	H2	3	MTWTF	110	Gordon
	H3	3	MTWTF	104	Ragland
	H4	3	MTWTF	100	
	J1	4	MTWTF	106	Dinkines
	J2	4	MTWTF	110	Hill
	J3	4	MTWTF	105	
	J4	4	MTWTF	100	Gordon
	P1	11	M	80	Nolan
		11	TT	105	
	T1	3	M	80	Grenard
		3	TT	105	
	U1	4	MTT	111	Lariviere

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	C1	10	MWF	111	Nolan
	F1	1	MWF	104	Nolan
	G1	2	MWF	101	
	J1	4	MWF	103	Alberti
	Q1	12	M	76	Ockert
		12	TT	105	

[1] Satisfies deficiency in solid geometry for engineering students; all other students receive full credit.

Math. 108. ELEMENTARY PLANE GEOMETRY:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No credit	B1	9	MWF	105	
	F1	1	MWF	103	Mann
	G1	2	MWF	103	Mann

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy and knowledge in general. Mathematics 109 and 110 meet the physical sciences requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

4 hours	D1	11	MTWT	100	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

3 hours[1]	A1	8	MWF	101	Deniston
	A2	8	MWF	102	
	*B1	9	MWF	102	
	C1	10	MWF	102	Ockert
	D1	11	MWF	101	Mann
	D2	11	MWF	102	Stelling
	*D3	11	MWF	103	Ondrak
	E1	12	MWF	101	Grenard
	E2	12	MWF	102	Gordon
	F1	1	MWF	101	Berglund
	F2	1	MWF	102	Murphy
	G1	2	MWF	111	Lariviere
	H1	3	MWF	101	
	H2	3	MWF	102	Hill
	*J1	4	MWF	102	

[1] Students with 95 or more credit hours receive only 2 hours credit.

*For Commerce students only.

Math. 112. COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	M1	9	M	80	Ockert
		9	TT	105	
	N1	10	M	80	Mann
		10	TT	105	
	N2	10	M	101	Ondrak
		10	TT	111	
	Q1	12	M	80	Olsen
		12	TT	100	
	*S1	2	TT	105	Grenard
		2	F	76	
	S2	2	TT	103	
		2	F	100	

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	L1	8	TT	101	Deniston
	L2	8	TT	102	
	M1	9	TT	101	
	M2	9	TT	102	
	N1	10	TT	100	Hartley
	N2	10	TT	102	Berglund
	P1	11	TT	101	Murphy
	P2	11	TT	102	Hornacek
	P3	11	TT	103	Feinstein
	Q1	12	TT	101	Stelling
	Q2	12	TT	102	Nolan
	S1	2	TT	101	Mann
	S2	2	TT	111	Alberti
	T1	3	TT	101	Pennisi
	T2	3	TT	102	Hill
	U1	4	TT	101	Ragland

[1]Students with 95 or more credit hours receive only 1 hour credit.

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, 114 or 115.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	A1	8	MTWTF	103	Stelling
	A2	8	MTWTF	104	Hornacek
	B1	9	MTWTF	104	Deniston
	B2	9	MTWTF	100	Olsen
	C1	10	MTWTF	104	Curtis
	D1	11	MTWTF	104	
	E1	12	MTWTF	104	Frank
	G1	2	MTWTF	104	Ragland
	H1	3	MTWTF	111	Lariviere
	H2	3	MTWTF	103	Dinkines
	J1	4	MTWTF	104	Grenard

[1]Students with 95 or more credit hours receive only 4 hours credit.

Math. 127. COMBINED FRESHMAN MATHEMATICS:- Continuation of Mathematics 117. Prerequisite: Mathematics 117.

Credit	Section	Hours	Days	Room	Instructor
4 hours	C1	10	TWTF	101	Frank
	G1	2	MTWT	100	Scholomiti

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122 or 123.

3 hours	A1	8	MWF	100	Curtis
	C1	10	MWF	105	Feinstein
	D1	11	MWF	105	Frank
	E1	12	MWF	105	Dinkines
	F1	1	MWF	100	Ondrak
	G1	2	MWF	105	Gordon
	H1	3	MWF	105	Pennisi

Math. 137. CALCULUS:- For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. Prerequisite: Mathematics 117 and 127, or consent of department.

3 hours	E1	12	MWF	100	Hornacek

Math. 142. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 132.

3 hours	F1	1	MWF	111	Feinstein

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Mathematics 133.

5 hours	B1	9	MTWTF	103	Berglund
	C1	10	MTWTF	103	Murphy
	D1	11	MTWTF	111	Scholomiti
	E1	12	MTWTF	103	Alberti
	G1	2	MTWTF	102	Hill

Math. 147. CALCULUS:- Continuation of Mathematics 137. Prerequisite: Mathematics 137.

3 hours	E1	12	MW	144	Lariviere
		12	F	80	

Math. 345. DIFFERENTIAL EQUATIONS:- Prerequisite: Mathematics 132 and 142, or 137 and 147.

3 hours	E1	12	MWF	123	Pennisi

MECHANICAL ENGINEERING

M. E. 171. MECHANISM:- Prerequisite: G. E. 101 and registration or credit in Physics 103 or Physics 106.

Credit	Section	Hours	Days	Room	Instructor
2 hours	C2	12-2	MWF	136	
	F2	8-11	TT	136	

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

3 hours	B	9	MWF	65	

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. C	10	MF	65	
	Lec. F	1	MF	65	
	Lab. A	8-11	Tu	63 & 71	
	Lab. B	8-11	Th	63 & 71	
	Lab. C	2-5	Tu	63 & 71	

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing; G. E. 101.

3 hours	Lec. P	11	TT	65	
	Lec. G	2	MF	65	
	Lab. A	8-11	Tu	64	
	Lab. B	2-5	Th	64	

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 104 or 108, and Math. 142 or 143.

3 hours	D1	11	MW	65	
		11-1	F	65	

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- Military organization; military policy of the United States; evolution of warfare; weapons; map reading; leadership, drill and exercise of command. Students must register in one theory and in one drill section. Prerequisite: Approval of the Military Science department.

1 hour	Theory 1X	9	MW	230	O'Neill
	Theory 2X	9	TT	230	O'Neill
	Theory 3X	10	MW	230	O'Neill

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Theory 4X	10	TT	230	O'Neill
	Theory 5X	2	MW	230	O'Neill
	Theory 6X	2	TT	230	O'Neill
	Drill	8	MTWTF	East End	Audit.

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- Military organization; weapons; scouting and patrolling; explosives and demolitions; leadership, drill and exercise of command. Students must register in one theory and in one drill section. Prerequisite: MS 101 and MS 102 or approval of the Military Science department.

1 hour	Theory 1X	9	MW	116	DeRoche
	Theory 2X	9	TT	116	DeRoche
	Theory 3X	10	TT	116	DeRoche
	Theory 4X	2	MW	116	DeRoche
	Drill	8	MTWTF	East End	Audit.

Mil. Sci. 205. ADVANCED INFANTRY:- Organization; weapons; gunnery with infantry weapons; leadership, drill and exercise of command. Students must register in one theory and in one drill section. Prerequisite: MS 103 and MS 104; successful completion of Armed Forces Qualification Tests; Officer type physical examination; and approval of Military Science department.

3 hours	Theory X	12	MTWT	230	McClenahan
	Drill	8	MTWTF	East End	Audit.

MUSIC

University Band:- The study and performance of a variety of band literature with public performances in the form of concerts, convocations, and selected university functions. Band instruments of most kinds are available for free use by students. Admission by consent of director.

No credit	*1	TT	354	Zahrt

*Rehearsals often continue for part or all of the two o'clock hour for those able to arrange their schedules to permit this, but while attendance during the two o'clock hour is desired, it is not required.

University Choir:- Rehearsal and public performance of standard choral works; training in sight singing. Admission by consent of director.

No credit	D1	11	MTT	354

University Orchestra:- Study and public performance of selected literature for the concert orchestra. Some instruments are available for free use by students. Admission by consent of the director.

Credit	Section	Hours	Days	Room	Instructor
No credit	UO	2	T	354	Zahrt
		12	*F	354	Zahrt

*Students who are unable to attend both meetings may enroll for one or the other with the consent of the director.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, arts, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	82	D. Morris
	D1	11	MWF	97	Page
	H1	3	MWF	97	Page
	N1	10	MTT	94	Page

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	82	D. Morris
	F1	1	MWF	97	Page
	Q1	12	MTT	97	D. Morris
	S1	2	MTT	96	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

2 hours	P1	11	TT	96	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for second, third, or fourth time should register for P.E.M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Fordham
	D	11	MWF	Gym	Kreidler
	E	12	MWF	Gym	Mann
	F	1	MWF	Gym	Kristufek

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	8	MWF	Gym	
	B	9	MWF	Gym	Fordham
	C	10	MWF	Gym	Frey
	D1	11	MWF	Gym	Kristufek
	D2	11	MWF	Gym	Versen
	E1	12	MWF	Gym	Rader
	E2	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Fordham
	G	2	MWF	Gym	Rader
	H	3	MWF	Gym	L. Miller

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period.

1 hour	MN	*9	TT	Town Club	Kristufek

*Classes will meet for 1½ hours.

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period.

1 hour	NP	*10	TT	Town Club	Kristufek

*Classes will meet for 1½ hours.

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	C	10	MWF	Gym	Bedard
	D	11	MWF	Gym	Frey
	E	12	MWF	Gym	Bedard
*Classes will meet for 1½ hours.	F	1	MWF	Gym	Frey
	G	2	MWF	Gym	L. Miller
	PQ	*11	TT	Gym	Bedard
	QR	**12	TT	Gym	Montcalm

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	NP	*10	TT	Gym	Kreidler

*Class will meet for 1½ hours.

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Kreidler
	D	11	MWF	Gym	Montcalm

**Students will be released early to participate in extra-curricular activities.

P. E. M. 114. APPARATUS STUNTS:-

Credit	Section	Hours	Days	Room	Instructor
*Classes will meet for 1½ hours.	E	12	MWF	Gym	Frey
	F	1	MWF	Gym	Montcalm
	H	3	MWF	Gym	Bedard
	QR	**12	TT	Gym	Bedard
	ST	*2	TT	Gym	Frey

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Strnad
	D	11	MWF	Gym	Berrafato
*Classes will meet for 1½ hours.	E	12	MWF	Gym	Strnad
	F	1	MWF	Gym	Berrafato
	G	2	MWF	Gym	Berrafato
	QR	**12	TT	Gym	

P. E. M. 118. WRESTLING:-

1 hour	A	8	MWF	Gym	Strnad
	B	9	MWF	Gym	Strnad
*Classes will meet for 1½ hours.	C	10	MWF	Gym	Mann
	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	Versen
	G	2	MWF	Gym	Mann
	H	3	MWF	Gym	Mann
	IM	*8	TT	Gym	Strnad
	QR	**12	TT	Gym	Kristufek
	ST	*2	TT	Gym	Berrafato

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-

1 hour	F	1	MWF	Gym	Kreidler
	NP	*10	TT	Gym	Strnad
	PQ	*11	TT	Gym	Kreidler

P. E. M. 123. WEIGHT LIFTING:-

1 hour	B	9	MWF	Gym	Bedard
	C	10	MWF	Gym	Versen
*Classes will meet for 1½ hours.	D	11	MWF	Gym	Rader
	E	12	MWF	Gym	Kreidler
	F	1	MWF	Gym	
	G	2	MWF	Gym	Frey
	IM	*8	TT	Gym	
	MN	*9	TT	Gym	L. Miller
	PQ	*11	TT	Gym	
	QR	**12	TT	Gym	Versen

**Students will be released early to participate in extra-curricular activities.

P. E. M. 129. VOLLEYBALL:

Credit	Section	Hours	Days	Room	Instructor
1 hour	A	**8	MWF	Gym	Bedard
	B	**9	MWF	Gym	
*Classes will meet for 1½ hours.	LM	*8	TT	Gym	Kreidler
	MN	*9	TT	Gym	Strnad
	NP	*10	TT	Gym	Berrafato
**Adaptive only.	PQ	*11	TT	Gym	Berrafato
	QR	***12	TT	Gym	Frey
***Students will be released early to participate in extra-curricular activities.	ST	*2	TT	Gym	Mann

P. E. M. 130. BEGINNING BASKETBALL:- Prerequisite: P. E. M. 106 and recommendation of instructor.

1 hour	F	1	MWF	Gym	Rader
	H	3	MWF	Gym	Rader

P. E. M. 132. ARCHERY:

1 hour	PQ	*11	TT	Gym	Rader
	ST	*2	TT	Gym	Gedvilas
*Classes will meet for 1½ hours.					

P. E. M. 136. BADMINTON:

1 hour	LM	*8	TT	Gym	L. Miller
	MN	*9	TT	Gym	
*Classes will meet	NP	*10	TT	Gym	Versen
for 1½ hours.	PQ	*11	TT	Gym	Montcalm
	QR	***12	TT	Gym	Mann
***Students will be released early to participate in extra-curricular activities.	ST	*2	TT	Gym	Fordham

P. E. M. 139. BACKYARD SPORTS:

1 hour	G	2	MWF	Gym	Gedvilas
	H	3	MWF	Gym	Berrafato

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

P. E. M. 140. BOATING AND FISHING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	NP	*10	TT	Gym	Rader
	QR	***12	TT	Gym	Gedvilas

*Classes will meet for 1½ hours.

***Students will be released early to participate in extra-curricular activities.

P. E. M. 143. AMERICAN SQUARE DANCE:

1 hour	F	1	MWF	Audit.	Staff

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in Physical Education.

2 hour	C	10	MW	28	L. Miller
	D	11	WF	28	Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in Physical Education. (second eight weeks)

2 hours	A	8-10	MTWTF	Gym	Gedvilas

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in Physical Education. (first eight weeks)

2 hours	A	8-10	MTWTF	Gym	Versen

P. E. M. 153. FITNESS PROGRAMS:- For students majoring in Physical Education.

2 hours	A	8	MWF	Gym	Montcalm
		9	TT		

P. E. M. 154. SWIMMING:- For students majoring in Physical Education.

2 hours	B	8	TT	Town Club	Kristufek
		9	MWF		

Recreation 174. CAMP COUNSELING:- For students majoring in Physical Education.

3 hours	E	12	MWF	28	Gedvilas

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:

P. E. W. 100. CONDITIONING ACTIVITIES: (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	B	9	MWF	Audit.	Anzalone
	C	10	MWF	Audit.	Anzalone
*Classes will meet	D	11	MWF	Audit.	Anzalone
for 1½ hours.	H	3	MWF	Audit.	Anzalone
	PQ	*11	TT	Audit.	Pesavento
	ST	*2	TT	Audit.	Anzalone

P. E. W. 102. MODIFIED ACTIVITIES:- (Open only to students assigned by Health Service)

1 hour	D	11	MWF	Audit.	Richardson

P. E. W. 105. ELEMENTARY RHYTHMS:

1 hour	B	9	MWF	Audit.	Spak
	C	10	MWF	Audit.	Spak
*Classes will meet	D	11	MWF	Audit.	Spak
for 1½ hours.	H	3	MWF	Audit.	Spak
	NP	*10	TT	Audit.	Spak
	PQ	*11	TT	Audit.	Spak

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P. E. W. 105 or consent of instructor.

1 hour	MN	*9	TT	Audit.	Spak

*Classes will meet for 1½ hours.

P. E. W. 123. BASKETBALL:

1 hour	TU	*3	TT	Audit.	Richardson

*Classes will meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:

1 hour	F	1	MWF	Audit.	Richardson
	MN	*9	TT	Audit.	Richardson

*Classes will meet for 1½ hours.

P. E. W. 130. BADMINTON:- Students to furnish own personal equipment.

1 hour	G	2	MWF	Audit.	Richardson

P. E. W. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and

P. E. W. 140. BOATING AND FISHING:- (Concluded) the department will furnish canoes, life jackets, etc.

Credit	Section	Hours	Days	Room	Instructor
1 hour	PQ	*11	TT	Audit.	Anzalone

*Classes will meet for 1½ hours.

P. E. W. 141. APPARATUS STUNTS AND TUMBLING:

1 hour	NP	*10	TT	Audit.	Richardson

*Classes will meet for 1½ hours.

P. E. W. 143. AMERICAN SQUARE DANCE:

1 hour	F	1	MWF	Audit.	Anzalone

P. E. W. 144. FOLK DANCING:

1 hour	E	12	MWF	Audit.	Barton

P. E. W. 150. ORIENTATION: (Professional course)

2 hours	F	1	MW	223	Pesavento

P. E. W. 151. BODY MECHANICS & GYMNASTICS: (Professional course)

2 hours	C	10	MTWTF	Audit.	Pesavento

P. E. W. 153. SOCCER, SPEEDBALL & VOLLEYBALL: (Professional course)

1 hour	E	12	MTWTF	Audit.	Pesavento

PHYSICAL SCIENCE

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and D.G.S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. B	9	WF	204	Meloy
	Lab. 1	9-12	M	85	R. Miller
	Quiz 1	9	Th	75	R. Miller
	Lab. 2	12-3	F	85	Krinsley

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES: (Concluded)

Credit	Section	Hours	Days	Room	Instructor
	Quiz 2	2	W	74	Krinsley
	Lab. 3	2-5	Tu	85	Cowin
	Quiz 3	4	Th	74	Cowin
	Lab. 4	1-4	W	85	Cowin
	Quiz 4	3	F	75	Cowin
	Lab. 5	2-5	Th	85	R. Miller
	Quiz 5	3	Tu	74	R. Miller

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- A continuation of Phys. Sci. 101. Credit will not be given for both Phys. Sci. 101-102 and D.G.S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. M	9	TT	210	Meloy
	Lab. 11	2-5	M	85	Meloy
	Quiz 11	2	F	74	Meloy

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Prerequisite: Math. 114 or 117.

5 hours	Lec. X	10	Tu	127
	Lec. Y	12	Tu	127
	Quiz A1	8	MWF	134
	Lab. A	8-11	Tu	122
	Quiz B1	9	MWF	134
	Lab. B	8-11	Th	122
	Quiz D1	11	MWF	134
	Lab. D	3-6	Th	122
	Quiz E1	12	MWF	134
	Lab. E	3-6	F	122
	Quiz F1	1	MWF	134
	Lab. F	3-6	M	122

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. Y	2	Th	127
	Quiz B1	9	MWF	113
	Lab. B	8-11	Th	124-122
	Quiz F1	1	MWF	123
	Lab. F	8-11	Tu	124-122

Physics. 106. GENERAL PHYSICS (MECHANICS):- For students in en-

Physics 106. GENERAL PHYSICS (MECHANICS):- (Concluded) gineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Math. 132, 133, or 137.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	11	M	127	
	Lec. Y	2	M	127	
	Quiz A1	8	WF	123	
	Lab. A	8-11	Tu	117	
	Quiz F1	1	WF	144	
	Lab. F	3-6	Th	117	
	Quiz M1	9	TT	123	
	Lab. M	12-3	M	117	
	Lab. 1P	3-6	W	117	
	Quiz P1	11	TT	65	
	Lab. 2P	8-11	W	117	
	Quiz P2	11	TT	134	
	Lab. Q	12-3	F	117	
	Quiz Q1	12	TT	134	
	Lab. S	8-11	F	117	
	Quiz S1	2	TT	134	
	Lab. 2S	3-6	M	117	
	Quiz S2	2	TT	144	
	Lab. T	3-6	M	117	
	Quiz T1	3	TT	134	

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106. Credit or registration in Math. 142, 143, or 147.

4 hours	Lec. X	11	W	127	
	Lec. Y	2	W	127	
	Quiz F1	1	MF	113	
	Lab. F	12-3	W	124	
	Quiz L1	8	TT	134	
	Lab. L	8-11	M	124	
	Quiz M1	9	TT	134	
	Lab. M	8-11	W	124	
	Quiz P1	11	TT	113	
	Lab. P	3-6	M	124	
	Quiz P2	11	TT	144	
	Lab. 2P	8-11	F	124	
	Quiz S1	2	TT	113	
	Lab. S	3-6	W	124	

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106. Credit or registration in Math. 142, 143, or 147.

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	11	F	127	
	Lec. Y	2	F	127	
	Quiz L1	8	TT	123	
	Lab. L	8-11	W	122	
	Quiz M1	9	TT	113	
	Lab. M	8-11	M	122	
	Quiz P1	11	TT	123	
	Lab. P	3-6	W	122	
	Quiz S1	2	TT	123	
	Lab. S	12-3	M	122	

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus.

4 hours	Quiz G1	2	MWF	207	
	Lab. G	3-6	Th	207	

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	B1	9	MWF	96	Gabis

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- A survey course covering such topics as the following: the development of the world system of states; the international political economic struggle for power; the determination and conduct of foreign policy; problems and organizations involved in maintaining peace.

3 hours	M1	9	MTT	97	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development of national and state governments; the federal system; national and state constitutions; civil and political rights; party systems; nature, structure, powers, and procedure of legislative and executive departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	96	Gabis

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B1	9	MWF	94	
	D1	11	MWF	96	
	N1	10	MTT	96	Barber
	S1	2	TT	17	Gabis
		3	Th		
	U1	3	Tu	17	Gabis
		4	TT		

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; police power; regulation in interstate commerce; promotion of social and economic welfare; current problems. Prerequisite: Pol. Sci. 150, or consent of department. Students may not receive credit for both Pol. Sci. 151 and 101 and 102.

3 hours	E1	12	MWF	96	Gabis

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

4 hours	Lec. E1	9	WF	210	Howard
	Quiz C1	10	WF	96	Howard
	Quiz E1	12	WF	82	Howard
	Quiz M1	9	TT	22	Fredian
	Quiz N1	10	TT	22	Howard
	Quiz Q1	12	TT	22	Howard
	Lec. P1	11	TT	210	Lipman
	Quiz D1	11	WF	14	Fredian
	Quiz G1	2	WF	22	Fredian
	Quiz H1	3	WF	20	Fredian
	Quiz Q2	12	TT	23	Fredian
	Quiz S1	2	TT	23	Fredian

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology, including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differ-

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- (Concluded)
ences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psych. 220 at the Urbana campus for credit. Prerequisite: Psych. 100, or its equivalent, or junior standing.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. C1	10	WF	210	Lipman
	Quiz M1	9	TT	24	Howard
	Quiz N1	10	TT	24	Lipman
	Quiz P1	11	TT	24	Fredian

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhet. 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhet. 101 without further examination.

No credit	A1	8	MWF	201	Kenny
	B1	9	MWF	201	Kenny
*Admission by consent of Division of Humanities.	C1	10	MWF	201	Carlson
	D1	11	MWF	201	Carlson
	D2	11	MWF	202	Kenny
	E1	12	MWF	201	Kenny
	*E2	12	MTWTF	202	Kirstein
	F1	1	MWF	201	Hegie
	F2	1	MWF	202	Fixler
	F3	1	MWF	203	Heiserman
	G1	2	MWF	201	F. Johnson
	*G2	2	MTWTF	202	Kirstein
	H1	3	MWF	201	Hegie
	J1	4	MWF	201	Hegie
	L1	8	M	220	S. Miller
			TT	201	
	M1	9	M	220	Jackman
			TT	201	
	N1	10	M	220	S. Miller
			TT	201	
	P1	11	M	220	
			TT	201	
	Q1	12	M	220	S. Miller
			TT	201	
	S1	2	M	220	Timmis
			TT	201	
	T1	3	M	220	Timmis
			TT	201	
	U1	4	M	220	Timmis
			TT	201	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Prerequisite: A passing grade on the placement examination or a passing grade in Rhet. 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	202	Atwood
	A2	8	MWF	203	Freyer
	B1	9	MWF	203	Atwood
	B2	9	MWF	205	Freyer
	B3	9	MWF	206	Jordan
	B4	9	MWF	229	Chillag
	C1	10	MWF	202	Atwood
	C2	10	MWF	203	Jordan
	C3	10	MWF	205	Kerwick
	C4	10	MWF	229	I. Miller
	C5	10	MWF	209	Kogan
	D1	11	MWF	203	Brown
	D2	11	MWF	205	Kirstein
	D3	11	MWF	209	Kerwick
	D4	11	MWF	224	I. Miller
	E1	12	MWF	203	Hipple
	E2	12	MWF	205	Griest
	E3	12	MWF	206	Hegie
	E4	12	MWF	229	Chillag
	F1	1	MWF	205	Carlson
	F2	1	MWF	209	Freyer
	F3	1	MWF	211	Jordan
	F4	1	MWF	214	Kerwick
	F5	1	MWF	216	Kogan
	F6	1	MWF	221	I. Miller
	F7	1	MWF	222	Chillag
	G1	2	MWF	203	Brown
	G2	2	MWF	205	Greenwald
	G3	2	MWF	209	Niederman
	G4	2	MWF	211	Heiserman
	G5	2	MWF	216	Carlson
	H1	3	MWF	202	Greenwald
	H2	3	MWF	203	Hipple
	H3	3	MWF	205	Heiserman
	H4	3	MWF	206	Niederman
	H5	3	MWF	209	Fixler
	H6	3	MWF	211	Griest
	J1	4	MWF	202	Greenwald
	J2	4	MWF	203	Hipple
	J3	4	MWF	205	Fixler
	J4	4	MWF	206	Niederman
	J5	4	MWF	209	Griest
	L1	8	MTT	206	Nicholas
	L2	8	MTT	209	Stronks

[1]Students with 95 or more credit hours receive only 2 hours credit.

UNIVERSITY OF ILLINOIS

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	L3	8	MTT	205	
	M1	9	MTT	202	
	M2	9	M	222	Karanikas
			TT	203	
	M3	9	M	223	Nicholas
			TT	205	
	N1	10	M	222	Leonhard
			TT	202	
	N2	10	M	223	J. Johnson
			TT	203	
	N3	10	M	224	Karanikas
			TT	205	
	N4	10	M	228	
			TT	209	
	P1	11	M	221	J. Johnson
			TT	202	
	P2	11	M	223	Waller
			TT	203	
	P3	11	M	226	Cassell
			TT	205	
	Q1	12	M	209	Gallagher
			TT	206	
	Q2	12	M	221	Nicholas
			TT	203	
	S1	2	M	221	J. Johnson
			TT	206	
	S2	2	M	222	Karanikas
			TT	203	
	S3	2	M	223	Waller
			TT	205	
	T1	3	MTT	212	Waller
	T2	3	M	221	Gallagher
			TT	202	
	U1	4	MTT	211	Matlaw

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Prerequisite: Rhet. 101.

3 hours[1]	A1	8	MWF	211	Mackin
	A2	8	MWF	217	Chillag
[1]Students with 95 or more credit hours receive only 2 hours credit.	B1	9	MWF	209	Vest
	B2	9	M	225	Mackin
			WF	215	
	C1	10	MWF	211	Blum
	C2	10	M	225	Mackin
			WF	214	

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	M	227	Blum
			WF	229	
	D2	11	M	228	Kogan
			WF	212	
	E1	12	M	222	Wright
			WF	212	
	E2	12	M	223	Mackin
			WF	215	
	F1	1	MWF	224	Love
	F2	1	MWF	225	Richey
	F3	1	MWF	226	Blum
	G1	2	M	224	Love
			WF	215	
	G2	2	MWF	226	Griest
	G3	2	MWF	227	Richey
	H1	3	MWF	222	Love
	H2	3	MWF	223	Richey
	H3	3	MWF	229	Lease
	J1	4	MWF	214	Lease
	M1	9	M	226	Rudin
			TT	206	
	N1	10	MTT	226	Gallagher
	N2	10	M	227	Rudin
			TT	206	
	P1	11	MTT	229	Matlaw
	Q1	12	M	224	Timmis
			TT	205	
	S1	2	MTT	229	Cassell
	T1	3	MTT	228	Matlaw
	U1	4	MTT	215	Cassell

Rhet. 133. EXPOSITORY WRITING:- Prerequisite: Rhet. 101 and 102; sophomore standing.

3 hours	F1	1	MWF	227	F. Johnson

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhet. 102. This course is not counted toward a major in English.

3 hours	C1	10	MWF	206	Oleksy
	D1	11	MWF	206	Oleksy
	F1	1	MWF	206	Oleksy
	F2	1	MWF	229	Brown
	G1	2	MWF	206	Oleksy
	M1	9	M	227	Leonhard
			TT	229	

Rhet. 151. BUSINESS LETTER WRITING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Q1	12	M TT	227 229	Leonhard

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. S1	2	TT	218	Endleman
	Quiz C1	10	WF	25	Corley
[1]Students with 95	Quiz D1	11	WF	16	Endleman
or more credit hours	Quiz H1	3	MF	96	Corley
receive only 3 hours	Quiz N1	10	TT	20	Corley
credit.	Quiz T1	3	TT	82	Endleman

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registration, in Pol. Sci. 150 or 151, or Hist. 151 or 152.

4 hours[1]	Lec. B1	9	M	218	Bill
	Quiz G1	2	MWF	82	Pickens
[1]Students with 95	Quiz H1	3	MWF	82	Pickens
or more credit hours	Quiz P1	11	MTT	82	Bill
receive only 3 hours	Quiz Q1	12	MTT	82	Jones
credit.					

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

4 hours[1]	Lec. F1	1	M	218	Colby
	Quiz P1	11	MTT	14	Colby
	Quiz Q1	12	TTF	14	Colby
	Quiz S1	2	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. E1	12	WF	218	Lipman-Klassen-Pickett
	Quiz B1	9	WF	97	Klassen
	Quiz D1	11	WF	82	Lipman

SOCIOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- Concerned with the scientific study of human societies. Prerequisite: Sophomore standing.

3 hours	C1	10	M	97	Klassen
			WF	94	Klassen
	F1	1	MWF	94	Klassen
	M1	9	TT	25	Corley
			F	23	
	S1	2	TT	25	Corley
			F	24	

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

3 hours	Q1	12	MTT	94	Corley

Sociol. 140. SOCIAL CONTROL:- Prerequisite: Sociology 100.

3 hours	D1	11	MWF	94	Klassen

ANTHROPOLOGY

Anthrop. 103. INTRODUCTION TO ANTHROPOLOGY: THE GROWTH OF CULTURE:- An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Prerequisite: Sophomore standing.

3 hours	G1	2	M	97	Endleman
			WF	96	
	Q1	12	TT	96	Endleman
			F	94	

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	A1	8	TWTF	227	Patlogan
	C1	10	TWTF	225	Sanchez
	D1	11	TWTF	227	Marsh
	E1	12	TWTF	227	Patlogan
	J1	4	TWTF	227	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Prerequisite: Spanish 101, or one year of high school Spanish.

4 hours[1]	B1	9	TWTF	225	Sanchez
	H1	3	TWTF	227	Tort

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

4 hours	B1	9	TWTF	227	Patlogan
	E1	12	TWTF	225	Marsh
	H1	3	TWTF	225	Marsh

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

4 hours	C1	10	TWTF	227	Patlogan
	G1	2	TWTF	225	Marsh

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

2 hours	P1	11	TT	225	Sanchez

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104, or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

Credit	Section	Hours	Days	Room	Instructor
No credit					
Sept. 27 - Nov. 10	P1	11	TT	217	Hoskins
Nov. 15 - Jan. 17	P2	11	TT	217	Hoskins
Sept. 27 - Nov. 10	T1	3	TT	217	Hoskins
Nov. 15 - Jan. 17	T2	3	TT	217	Hoskins

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

3 hours[1]	A1	8	MWF	219	Evans
	B1	9	MWF	219	Evans
	B2	9	MWF	217	Hovde
[1]Students with 95	C1	10	MWF	219	Evans
or more credit hours	C2	10	MWF	217	Hovde
receive only 2 hours	D1	11	MWF	219	Wright
credit.	D2	11	MWF	217	Hovde
	E1	12	MWF	211	Evans
	E2	12	MWF	219	Crews
	F1	1	MWF	219	Crews
	F2	1	MWF	212	Hovde
	G1	2	MWF	217	Thompson
	G2	2	MWF	219	Hoskins
	H1	3	MWF	217	Thompson
	H2	3	MWF	219	Crews
	J1	4	MWF	219	Crews
	L1	8	MTT	214	Goulson
	M1	9	M	214	Goulson
			TT	219	
	N1	10	M	221	Pitt
			TT	219	
	P1	11	M	214	Pitt
			TT	219	
	S1	2	M	214	Pitt
			TT	219	

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice.

2 hours[1]	D1	11	MWF	216	Rigler
	F1	1	MWF	217	Hoskins

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	Q1	12	TT	217	Hovde

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	M1	9	TT	217	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretations, analysis, and oral reading of prose literature and verse.

2 hours[1]	N1	10	TT	217	Goulson
	S1	2	TT	217	Evans
	U1	4	TT	219	Crews

[1]Students with 95 or more credit hours receive only 1 hour credit.

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):-Prerequisite: Registration in Math. 142 or 147.

2 hours	N1	10	TT	123
	Q1	12	TT	144

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142 or 147.

4 hours	B1	9	MWTF	144
	H1	3	MWTF	144

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 142.

Credit	Section	Hours	Days	Room	Instructor
5 hours	C1	10	MTWTF	113	

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 122 or 127. For architecture students only.

3 hours	J1	4	MWF	113	

T. A. M. 172. STRENGTH OF MATERIALS:- Prerequisite: T.A.M. 171.

3 hours	G1	2	MWF	113	

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T.A.M. 150.

3 hours	C1	10	MWF	134	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T.A.M. 150 or T.A.M. 154 or T.A.M. 156.

3 hours	D1	11	MWF	113	

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T.A.M. 221.

1 hour	Lab. A	10-12	Th	61
	Lab. B	9-11	W	61

IDEN. NUMBER_____

Name in full.....
[Print] [Last name first; then given names]

Address.....
(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____ Examiner and Recorder's Stamp Here

Date.....

College.....

Curriculum.....

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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TIME TABLE

— Second Semester —

1955-56

UNIVERSITY OF ILLINOIS

Chicago Undergraduate Division

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TABLE OF CONTENTS

Pre-Registration Advisement Schedule....3
Calendar, Second Semester, 1956....4
Second Semester, Registration Schedule....5
Legend for Section Letters....5
Chicago Undergraduate Division Calendar, 1956....6
Urbana Calendar....7
Accountancy....8
Anthropology....57
Architecture....9,10
Art....10
Biological Sciences....11-14
Business Law....14
Chemistry....14-19
Civil Engineering....19
Economics....19-21
Education....21
Electrical Engineering....21,22
English....22-24
French....24,25
General Engineering....25,26
Geography....26,27
Geology....27,28
German....28,29
History....29,30
Humanities....30,31
Hygiene....31,32
Management....32,33
Marketing....33
Mathematics....33-37
Mechanical Engineering....37
Military Science and Tactics....37,38
Music....39
Philosophy....39,40
Physical Education for Men....40-44
Physical Education for Women....45,46
Physical Sciences....46,47
Physics....47-49
Political Science....49,50
Psychology....50,51
Rhetoric....51-55
Social Sciences....55,56
Sociology....56,57
Spanish....57,58
Speech....58-60
Theoretical and Applied Mechanics....60,61

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PRE-REGISTRATION ADVISEMENT SCHEDULE
Second Semester, 1955-56

FORMER STUDENTS ONLY

PLACE: Liberal Arts and Sciences.....Room 29
Commerce.....Room 27
Engineering.....Room 184

A - E	Monday	February 6	9 - 12 a.m.
F - K	Monday	February 6	1 - 4 p.m.
L - Q	Tuesday	February 7	9 - 12 a.m.
R - Z	Tuesday	February 7	1 - 4 p.m.

NEW STUDENTS

PLACE: Liberal Arts and Sciences.....Room 29

A - L	Wednesday	February 8	9 - 12 a.m.
M - Z	Wednesday	February 8	1 - 4 p.m.

Physical Education

No pre-advisement is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

Second Semester, Spring 1956

Thurs., Feb. 2 - Tues., 7	Orientation Period.
Wed., Feb. 8 - Fri., Feb. 10	Registration (Students registering for less than 12 hours report at 11:00 a.m. Fri., Feb. 10, for registration).
Mon., Feb. 13	Instruction Begins.
Wed., Feb. 15, 1:00 p.m.	Earliest time at which program changes may be made.
Mon., Feb. 20, 4:00 p.m.	Latest date for changes of study-lists without fee.
Fri., Feb. 24, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Mar. 2	University Day (University opened, 1868) (Not a Holiday)
Thurs., Mar. 29, 12:00 noon	Mid-semester grades are due.
Thurs., March 29, 6:00 p.m.	Easter Vacation Begins.
Fri., Mar. 30, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Wed., Apr. 4, 8:00 a.m.	Easter Vacation Ends.
Fri., Apr. 6, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Fri., May 11	Honors Day.
Fri., May 4, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal.
Fri., May 11	Students withdrawing on or after this date must petition for readmission.
Wed., May 30	Memorial Day
Mon., June 4 - Tues., June 12	Semester Examinations.
Wed., June 13, 10:00 a.m.	General Educational Development Tests, College Level, Room 300 (For all veterans who entered the Spring Semester, 1956 as beginning freshmen).

REGISTRATION SCHEDULE

Second Semester 1955-56

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 2:00 p.m., Friday, February 10, 1956, will be assessed a late registration fee of $5.00.

A - Bus	Thursday, February 9	10	a.m.
But - Fal	Wednesday, February 8	2	p.m.
Fam - Hik	Thursday, February 9	9	a.m.
Hil - Lio	Wednesday, February 8	3	p.m.
Lip - Nor	Wednesday, February 8	10	a.m.
Nos - Ros	Thursday, February 9	11	a.m.
Rot - Thy	Wednesday, February 8	1	p.m.
Thz - Z	Wednesday, February 8	11	a.m.

NEW STUDENTS

Students registering for less than 12 semester hours will register at 11:00 a.m., Friday, February 10.

A - Dea	Friday, February 10	10	a.m.
Deb - Har	Thursday, February 9	3	p.m.
Has - Lee	Friday, February 10	9	a.m.
Lef - Par	Thursday, February 9	2	p.m.
Pas - Sok	Friday, February 10	11	a.m.
Sol - Z	Thursday, February 9	1	p.m.

LEGEND FOR SECTION LETTERS*

Hour	5, 4, and 3 hour courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1956

Second Semester (Spring 1956)

Thurs., Feb. 2 - Tues., 7	Orientation Period
Wed., Feb. 8 - Fri., Feb. 10	Registration
Mon., Feb. 13	Instruction Begins
Fri., Mar. 2	University Day (University opened, 1868) (Not a Holiday)
Thurs., Mar. 29, 6 p.m.	Easter Vacation Begins
Wed., Apr. 4, 8 a.m.	Easter Vacation Ends
Fri., May 11	Honors Day
Wed., May 30	Memorial Day
Mon., June 4 - Tues., June 12	Semester Examinations

Summer Session - 1956

Fri., June 22 - Sat., June 23	Registration
Mon., June 25	Instruction Begins
Wed., July 4	Independence Day
Fri., Aug. 17 - Sat., Aug. 18	Summer Session Examinations

First Semester (Fall, 1956)

Wed., Sept. 5 - Wed., Sept. 12	Orientation Period
Wed., Sept. 12 - Fri., Sept. 14	Registration
Mon., Sept. 17	Instruction Begins
Wed., Nov. 21, 6 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 26, 8 a.m.	Thanksgiving Vacation Ends
Mon., Dec. 3	Illinois Day (State admitted to the Union, 1818) (Not a Holiday)
Fri., Dec. 14, 6 p.m.	Christmas Vacation Begins
Wed., Jan. 2, 8 a.m.	Christmas Vacation Ends
Fri., Jan. 18 - Sat., Jan. 26	Semester Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1956

Second Semester (Spring 1956)

Tues., Jan. 31 - Fri., Feb. 3	Entrance Examinations
Mon., Feb. 6 - Wed., Feb. 8	Registration
Thurs., Feb. 9	Instruction Begins
Fri., Mar. 2	University Day (University opened, 1868)
Thurs., Mar. 29, 1 p.m.	Easter Vacation Begins
Wed., Apr. 4, 1 p.m.	Easter Vacation Ends
Fri., May 4	Honors Day (Classes dismissed at noon)
Wed., May 30	Memorial Day
Thurs., May 31 - Fr., June 8	Semester Examinations
Sat., June 16	Commencement Exercises

Summer Session 1956

Tues., June 5 - Fri., June 8	Entrance Examinations
Mon., June 18	Registration
Tues., June 19	Instruction Begins
Wed., July 4	Independence Day
Fri., Aug. 10 - Sat., Aug. 11	Summer Session Examinations

First Semester (Fall, 1956)

Tues., Sept. 4 - Fri., Sept. 7	Entrance Examinations
Mon., Sept. 10 - Sat., Sept. 15	Freshman Week and Registration
Mon., Sept. 17	Instruction Begins
Wed., Nov. 21, 1 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 26, 1 p.m.	Thanksgiving Vacation Ends
Mon., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Fri., Dec. 21, 1 p.m.	Christmas Vacation Begins
Thurs., Jan. 3, 1 p.m.	Christmas Vacation Ends
Thurs., Jan. 17	Study Day, (Classes dismissed at noon)
Fri., Jan. 18 - Sat., Jan. 26	Semester Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	21	Schneider
	C1	10	MWF	22	Graff
	C2	10	MWF	21	Schneider
[1]Students with 95 or more credit hours receive only 2 hours credit.	D1	11	MWF	19	Graff
	E1	12	MWF	24	Fox
	F1	1	MWF	16	Graff
	G1	2	MWF	24	Fox
	G2	2	MWF	19	Stanton
	H1	3	MWF	23	Schneider
	J1	4	MWF	25	Fox
	P1	11	MTT	16	Stanton
	Q1	12	MTT	16	Stanton

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101. Prerequisite: Accy. 101.

3 hours[1]	C1	10	MWF	20	Yankow
	D1	11	MWF	20	Yankow
	F1	1	MWF	24	Kabbes
[1]Students with 95 or more credit hours receive only 2 hours credit.	G1	2	MWF	17	Gray
	G2	2	MWF	21	Yankow
	H1	3	MWF	24	Kabbes
	J1	4	MWF	24	Stanton
	M1	9	MTT	20	Gray
	Q1	12	MTT	20	Ross
	T1	3	MTT	17	Ross
	U1	4	MTT	17	Ross

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	B1	9	MWF	22	Kabbes
	D1	11	MWF	21	Kabbes
	F1	1	MWF	17	Gray
	N1	10	MTT	23	Gray

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	E1	12	MWF	25	Schneider
	F1	1	MWF	21	Yankow
	N1	10	MTT	25	Ross

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	10	W	251	
	Lab. A	8-10	MWF	241	
	Lab. B	11-2	TT	241	
	Lab. C	8-11	TT	241	
	Lab. D	12-2	MWF	241	
	Lab. E	2-4	MWF	241	
	Lab. F	4-6	MWF	241	

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. R	1	TT	251	

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G. E. 108.

3 hours	Lec.	2	W	251	
	Lab. A	8-11	MF	241	
		9-11	W	241	
	Lab. A2	8-11	MF	241	
		9-11	W	241	
	Lab. B	2-5	MF	241	
		3-5	W	241	

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of the fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

3 hours	Lec.	12	W		
	Lab. A	11-2	MF	242	
		1-3	W	242	
	Lab. B	12-3	MF	242	
		1-3	W	242	
	Lab. C	3-6	MF	242	
		3-5	W	242	

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	8-11	MWF	242	

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family re-

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- (Concluded). sidences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lec. Q	12	TT	251	

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lec. B	9	MF	251

ART

Art 112. INTRODUCTION TO RENAISSANCE AND MODERN ART:- Cultural analysis of the interrelated fields of architecture, sculpture, and painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period.

3 hours	Lec. D1	11	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Lec. H1	3	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in architecture.

2 hours	Lab. A	8-10	MWF	83
	Lab. B	10-12	MWF	83
	Lab. C	12-2	MWF	83

Art 182. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 181.

2 hours	Lab. A	8-10	MWF	84
	Lab. B	12-2	MWF	84
	Lab. C	2-4	MWF	84
	Lab. D	8-11	TT	84
	Lab. E	11-2	TT	84
	Lab. F	3-6	TT	84

Art 183. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 182.

2 hours	Lab. A	9-12	MF	91
	Lab. B	8-11	TT	91
	Lab. C	3-6	TT	91

Art 184. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 183.

2 hours	Lab. A	2-5	MF	83
	Lab. B	3-6	MF	91
	Lab. C	8-11	TT	83
	Lab. D	3-6	TT	83

BIOLOGY

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures, laboratory, and quiz. Credit will not be given for both Biology 101 and D.G.S., 131. (Lecture, laboratory and quiz sections in this course are coordinate. Laboratory and quiz sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. M1	9	TT	210	Glassman
	Lab. 1	11-1	TT	45	McQuate
	Quiz 1	9	M	45	McQuate
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	12-2	TT	46	Holden
	Quiz 2	12	M	46	Holden
	Lab. 3	8-10	WF	45	Yokoyama
	Quiz 3	8	M	45	Yokoyama
	Lab. 4	8-10	WF	48	Glassman
	Quiz 4	8	M	48	Glassman
	Lab. 5	4-6	WF	46	Holden
	Quiz 5	4	M	46	Holden
	Lab. 6	10-12	TT	46	Presley
	Quiz 6	11	M	46	Presley
	Lec. Q1	12	TT	218	Pickett
	Lab. 7	3-5	TT	48	Holden
	Quiz 7	3	M	48	Holden
	Lab. 8	12-2	WF	46	Holden
	Quiz 8	1	M	46	Holden
	Lab. 9	8-10	TT	48	Yokoyama
	Quiz 9	9	M	48	Yokoyama
	Lab. 10	8-10	WF	46	Presley
	Quiz 10	9	M	46	Presley
	Lab. 11	8-10	TT	46	Presley
	Quiz 11	8	M	46	Presley
	Lab. 12	3-5	TT	46	W. J. Dembski
	Quiz 12	3	M	46	W. J. Dembski
	Lec. T1	3	TT	218	Little
	Lab. 13	10-12	WF	46	Presley
	Quiz 13	10	M	46	Presley
	Lab. 14	12-2	WF	48	Lininger
	Quiz 14	12	M	48	Lininger
	Lab. 15	4-6	WF	48	Little
	Quiz 15	4	M	48	Little
	Lab. 16	2-4	WF	48	Little
	Quiz 16	2	M	48	Little
	Lab. 17	12-2	TT	48	Little
	Quiz 17	1	M	48	Little

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:- Application of biological principles to the living world. Lectures, laboratory, and quiz. Prerequisite: Biology 101. Credit will not be given for both Biological Sciences 102 and D.G.S. 132. (Lecture, laboratory and quiz sections in this course are coordinate. Laboratory and quiz sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. E1	12	WF	218	Staff
	Lab. 1	8-10	TT	43	Madison-Glassman
	Quiz 1	9	M	43	Madison-Glassman
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	10-12	TT	43	Glassman
	Quiz 2	11	M	43	Glassman
	Lab. 3	10-12	WF	43	McQuate
	Quiz 3	10	M	43	McQuate
	Lab. 4	12-2	TT	43	Sangster
	Quiz 4	12	M	43	Sangster
	Lab. 5	8-10	TT	44	Lininger
	Quiz 5	8	M	44	Lininger
	Lab. 6	12-2	TT	44	Williams-Rouffa
	Quiz 6	12	M	44	Williams-Rouffa
	Lab. 7	2-4	WF	43	W. J. Dembski
	Quiz 7	2	M	43	W. J. Dembski
	Lab. 8	4-6	WF	43	W. J. Dembski
	Quiz 8	4	M	43	W. J. Dembski
	Lec. Q1	12	TT	210	Staff
	Lab. 9	12-2	WF	43	Yokoyama
	Quiz 9	1	M	43	Yokoyama
	Lab. 10	10-12	TT	44	Madison
	Quiz 10	10	M	44	Madison
	Lab. 11	3-5	TT	43	McQuate
	Quiz 11	3	M	43	McQuate
	Lab. 12	10-12	WF	44	Yokoyama
	Quiz 12	11	M	44	Yokoyama
	Lab. 13	12-2	WF	44	McQuate
	Quiz 13	1	M	44	McQuate
	Lab. 14	2-4	WF	44	Lininger
	Quiz 14	2	M	44	Lininger
	Lab. 15	4-6	WF	44	Lininger
	Quiz 15	4	M	44	Lininger

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

Biology 111. GENERAL BOTANY: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. F1	1	WF	210	Rouffa
	Lab. 1	10-12	WF	48	Rouffa
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 1	10	M	48	Rouffa

Biology 115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY): - Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 111.

4 hours[1]	Lec. T1	3	TT	45	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 1	11	M	48	Rouffa

Biology 121. MICROBIOLOGY: - A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. M1	3	WF	65	Madison
	Lab. 1	8-10	WF	43	Madison
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 1	8	M	43	Madison

Biology 131. GENERAL ZOOLOGY: - A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. Prerequisite: Biology 101.

4 hours[1]	Lec. G1	2	WF	210	A. Williams
	Lab. 1	3-5	TT	44	A. Williams
[1]Students with 95 or more credit hours	Quiz 1	3	M	44	A. Williams
	Lab. 2	8-10	WF	44	A. Williams
receive only 3 hours credit.	Quiz 2	9	M	44	A. Williams

Biology 132. COMPARATIVE VERTEBRATE ANATOMY: - Classification and distribution of the vertebrate animals. Comparative anatomy of

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- (Continued) organs and organ systems, their functions and evolution. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. D1	11	MWF	210	Shank
	Lab. 1	8-11	TT	45	Spirakis
	Lab. 2	2-4	MWF	45	Spirakis
	Lab. 3	4-6	MWF	45	Spirakis

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. G1	2	MWF	218	Sangster
	Lab. 1	10-12	MWF	45	Sangster
	Lab. 2	12-2	MWF	45	Shank

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	D1	11	MWF	24	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chem. 102. Prerequisite: one unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Math. 111 or 112.

5 hours[1]	Lec. P	11	TT	210	Hunt
	Lab. 1	8-10	MWF	53	Johnson
	Quiz 1	8	TT	74	Johnson
	Lab. 2	10-12	MWF	53	Seabright-Crum
	Quiz 2	9	TT	80	Seabright
	Lab. 3	9-12	MW	53	Hunt
	Quiz 3	9	TT	74	Hunt
	Lab. 4	2-4	MWF	53	Hunt-Ingram
	Quiz 4	3	TT	74	Hunt
	Lab. 5	3-6	TT	53	Ingram
	Quiz 5	4	WF	74	Ingram

[1]Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 or more credit hours receive only 3 hours credit.

NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING.

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: one unit of entrance credit in chemistry or equivalent.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	Lec. N	10	TT	204	Mueller
	Lab. 11	9-11	M	53	Eisenhardt
	Quiz 11	9	WF	74	Eisenhardt
[1]Students with 95	Lab. 12	10-12	M	53	R. L. Miller
or more credit hours	Quiz 12	10	WF	74	R. L. Miller
receive only 2 hours	Lab. 13	11-1	Tu	53	Johnson
credit.	Quiz 13	10	WF	75	Johnson
	Lab. 14	12-2	F	53	Questiaux
	Quiz 14	12	TT	74	Questiaux
	Lab. 15	1-3	M	53	Johnson
	Quiz 15	2	WF	74	Johnson
	Lab. 16	2-4	M	53	Cowin
	Quiz 16	10	WF	76	Cowin
	Lab. 17	2-4	F	53	Story
	Quiz 17	2	MW	75	Story

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or $2\frac{1}{2}$ units of entrance credit in mathematics, or credit in Math. 111 or 112.

4 hours[1]	Lec. D	11	WF	204	Bachrach
	Lec. P	11	TT	204	Bachrach
	Lab. 26	8-10	WF	50	MacKay
[1]Students who have	Quiz 26	10	TT	75	MacKay
used their high	Lab. 27	10-12	TT	50	
school chemistry for	Quiz 27	9	TT	75	
entrance credit are	Lab. 28	12-2	WF	50	Bachrach-Johnson
given only 3 hours	Quiz 28	1	TT	74	Bachrach
credit for chem. 103.	Lab. 29	2-4	WF	50	Seabright
Students with 95	Quiz 29	1	WF	74	Seabright
or more credit hours	Lab. 30	12-2	TT	50	Seabright
receive only 3 hours	Quiz 30	11	TT	80	Seabright
credit.	Lab. 31	9-11	MW	50	Egbert
	Quiz 31	8	MW	75	Egbert
	Lab. 32	10-12	TT	50	Cowin
	Quiz 32	12	TT	75	Cowin
	Lab. 33	1-3	MW	50	Bachrach
	Quiz 33	3	WF	74	Bachrach
	Lab. 34	3-5	TT	50	Savoy
	Quiz 34	5	TT	74	Savoy
	Lab. 35	8-10	TT	50	MacKay
	Quiz 35	11	WF	74	MacKay

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chem. 101, 102, or 103.

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. C	10	WF	204	Huitema
	Lec. F	1	WF	204	Huitema
	Lab. 38	8-10	TT	50	Sackheim
[1]Credit in Chem. 104	Quiz 38	11	WF	75	Sackheim
will not be granted	Lab. 39	10-12	TT	50	Huitema
to students who have	Quiz 39	1	TT	75	Huitema
received credit in	Lab. 40	12-2	TT	50	Sackheim
Chem. 105 or 106.	Quiz 40	12	MW	74	Sackheim
Students with 95	Lab. 41	3-5	TT	50	Huitema-Barker
or more credit hours	Quiz 41	3	WF	75	Huitema
receive only 3 hours	Lab. 42	9-11	TT	50	Perry
credit.	Quiz 42	9	WF	80	Perry
	Lab. 43	11-1	TT	50	Carbonaro
	Quiz 43	10	TT	76	Carbonaro
	Lab. 44	4-6	TT	50	Harris
	Quiz 44	11	WF	76	Harris
	Lab. 45	8-10	WF	50	Sackheim
	Quiz 45	10	TT	80	Sackheim
	Lab. 46	10-12	WF	50	Perry
	Quiz 46	11	TT	74	Perry
	Lab. 47	12-2	WF	50	Harris
	Quiz 47	12	TT	76	Harris
	Lab. 48	2-4	WF	50	Perry
	Quiz 48	3	TT	76	Perry
	Lab. 49	4-6	MW	50	Harris
	Quiz 49	3	TT	80	Harris

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chem. 104 or 106. Prerequisite: Chem. 101, 102, or 103.

5 hours[1]	Lec. G	2	MW	204	
	Lab. 51	8-10	MWF	53	Carbonaro
	Quiz 51	8	TT	75	Carbonaro
[1]Credit in Chem. 105	Lab. 52	10-12	MWF	53	Barker
will not be granted	Quiz 52	12	WF	75	Barker
to students who have	Lab. 53	12-2	MWF	53	Egbert
received credit in	Quiz 53	10	TT	74	Egbert
Chem. 104 or 106.	Lab. 54	3-5	MWF	53	Mansfield-Savoy
Students with 95	Quiz 54	4	TT	74	Mansfield
or more credit hours	Lab. 55	9-12	TT	53	Barker
receive only 3 hours	Quiz 55	9	MW	75	Barker
credit.	Lab. 56	3-6	TT	53	
	Quiz 56	4	MW	75	

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. Prerequisite: Chem. 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. T	3	TT	204	Mueller
	Lab. 61	8-11	TT	53	Mueller-Story
	Quiz 61	9	MW	76	Mueller
	Lab. 62	1-3	MWF	53	Mueller-Carbonaro
	Quiz 62	1	TT	80	Mueller

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Chem. 107.

5 hours[1]	Lec. C	10	WF	210	Weldon
	Lab. 71	8-11	TT	53	Eisenhardt
	Quiz 71	8	MW	76	Eisenhardt
	Lab. 72	1-3	MWF	53	Weldon
	Quiz 72	1	TT	76	Weldon

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chem. 107 rather than Chem. 109. Pre-medical students requiring more than five hours of General-Inorganic chemistry are advised to take a two-semester sequence instead of Chem. 109. Prerequisite: High school chemistry. Graduation from high school in the upper quarter of the high school class.

5 hours[1]	Lec. E	12	MWF	204	Schrage
	Lab. 66	8-11	F	50	Egbert
	Quiz 66	12	TT	80	Egbert

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chem. 107 and 108. Prerequisite: Chem. 106.

Chem. 110. QUALITATIVE ANALYSIS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. M	9	TT	65	Mansfield
	Lab. 76	9-11	M	53	Mansfield
		9-12	WF		
	Quiz 76	11	TT	75	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometric relations, practical applications. Prerequisite: Chem. 104, 105, or 106.

5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	8-11	MWF	54	Gottlieb
	Quiz 81	8	Th	76	Gottlieb
	Lab. 82	10-1	MWF	54	Story
	Quiz 82	11	Tu	76	Story
	Lab. 83	12-3	MWF	54	Gottlieb
	Quiz 83	11	Th	76	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in the chemistry curriculum and chemical engineering. Prerequisite: Chem. 110 or satisfactory record in Chem. 107 and 108.

5 hours	Lec. E	12	WF	65	Babler
	Lab. 86	2-5	MWF	54	Babler
	Quiz 86	12	M	75	Babler

Chem. 132. ELEMENTARY ORGANIC CHEMISTRY:- This course does not satisfy the organic chemistry prerequisite for Chem. 350, 354, or 355. Beginning course in organic chemistry especially for students in pre-nursing curriculum and in the continuation nursing curriculum. Prerequisite: Chem. 101 or 102, or equivalent.

3 hours	Lec. N	10	TT	210	Weldon
	Lab. 74	12-3	M	52	Carbonaro
	Quiz 74	2	W	76	Carbonaro

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chem. 105 or 110.

5 hours	Lec. E	12	WF	210	Crum
	Exam Hour	12	M	210	
	Lab. 91	8-11	WF	52	Questiaux
	Quiz 91	9	M	74	Questiaux
	Lab. 92	8-11	TT	52	Questiaux
	Quiz 92	8	M	74	Questiaux
	Lab. 93	2-5	WF	52	R. L. Miller
	Quiz 93	3	Tu	75	R. L. Miller

Chem. 234. ORGANIC CHEMISTRY:- For students whose major is chemistry, or for those registered in the curriculum of chemistry or chemical engineering. Prerequisite: Chem. 124.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. T	1	TT	65	Crum
	Lab. 95	2-5	MW	52	Crum
	Quiz 95	2	F	75	Crum

Chem. 247. ELEMENTARY PHYSICAL CHEMISTRY:- For pre-medical students only. Lectures and laboratory. Prerequisite: Chem. 122 and 133; Physics 102 or 104, or equivalent.

4 hours	Lec. B	9	MWF	210	Schrage
	Lab. 97	8-11	Tu	50A	Schrage

CIVIL ENGINEERING

C.E. 106. SURVEYING:- Prerequisite: C.E. 105. Credit or registration in G.E. 111.

3 hours	Lec. R1	1	TT	63	Coe
	Lab. A	8-11	Th	63	LaRoy
	Lab. B	12-3	F	63	LaRoy

C.E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	Lec. B1	9	MWF	63	Coe

C.E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering or architecture.

2 hours	Lab. A	10-12	MW	61	Coe
	Lab. B	11-1	TT	61	Coe

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	18	J. R. Morris
	C1	10	MWF	18	J. R. Morris
	E1	12	MWF	23	Grampp
	E2	12	MWF	18	Geldard
	F1	1	MWF	23	J. R. Morris
	G1	2	MWF	23	Grampp
	G2	2	MWF	16	Graff
	P1	11	MTT	22	Shaw
	T1	3	MTT	25	Shaw
	U1	4	MTT	16	Geldard

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	19	Knudson
	E1	12	MWF	21	Wendt
	G1	2	MWF	20	Knudson
	H1	3	MWF	19	Wendt
	M1	9	MTT	23	Shaw
	R1	1	MTT	25	Shaw

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	B1	9	MWF	25	Grampp
	B2	9	MWF	24	Gillett
	C1	10	MWF	17	O. Miller
	D1	11	MWF	23	Grampp
	D2	11	MWF	17	O. Miller
	F1	1	MWF	22	Gillett

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	D1	11	MWF	25	Dunne
	E1	12	MWF	22	Jung
	G1	2	MWF	25	Dunne
	J1	4	MWF	20	Jung
	R1	1	MTT	19	H. F. Williams
	T1	3	MTT	22	H. F. Williams

Econ. 136. AMERICAN ECONOMIC HISTORY:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. Open only to freshmen and sophomores.

3 hours	B1	9	MWF	16	Wendt
	C1	10	MWF	16	Wendt
	D1	11	MWF	18	Geldard
	F1	1	MWF	18	O. Miller
	G1	2	MWF	18	O. Miller
	Q1	12	MTT	19	H. F. Williams
	T1	3	MTT	16	Geldard
	U1	4	MTT	22	H. F. Williams

Econ. 138. EUROPEAN ECONOMIC HISTORY:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open only to freshmen and sophomores.

Credit	Section	Hours	Days	Room	Instructor
3 hours	H1	3	MWF	20	Jung

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108. Sophomore standing. Commerce students are required to elect Econ. 170 and will not be allowed credit for Psych. 135 or Math. 161.

3 hours	B1	9	MW	33	Derrick
	Prac. I	9-11	F	33	Derrick
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick
	N1	10	MTu	33	Larson
	Prac. IV	9-11	Th	33	Larson
	R1	1	MTu	33	Larson
	Prac. V	12-2	Th	33	Larson

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	T1	3	TT	28	Ricks

Ed. 109. EDUCATIONAL PSYCHOLOGY:- The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Prerequisite: Psychology 100.

3 hours	R1	1	MTT	28	Ricks

ELECTRICAL ENGINEERING

E.E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture students only.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. E1	12	MWF	123	Wozniak

E.E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Credit or registration in Phsyics 107 and Math. 142, 143 or 147.

4 hours	Lec. M1	9	M	134	Klapperich
		9	TT	123	Klapperich
	Lab. M	9-12	F	120	Klapperich
	Lec. D1	11	MWF	123	Klapperich
	Lab. D	11-2	Th	120	Klapperich
	Lec. G1	2	MWF	123	Klapperich
	Lab. G	3-6	Tu	120	Klapperich

ENGLISH

Engl. 101. INTRODUCTION TO POETRY: - Understanding of poetry through the reading and discussion of representative poems. Note: Credit is not given for English 101, 102, and 103 in addition to English 121, 122, and 123. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

3 hours[1]	A1	8	MWF	215	Freyer
	C1	10	MWF	214	Schiller
[1]Students with 95	D1	11	MWF	214	F. Johnson
or more credit hours	G1	2	MWF	214	Stronks
receive only 2 hours	M1	9	MTT	215	Karanikas
credit.	N1	10	MTT	206	Jackman
	T1	3	MTT	215	J. Johnson

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. See note under Engl. 101.

3 hours[1]	A1	8	MWF	214	I. Miller
	B1	9	MWF	214	Mackin
[1]Students with 95	D1	11	MWF	216	Love
or more credit hours	F1	1	MWF	214	Niederman
receive only 2 hours	J1	4	MWF	215	Jordan
credit.	M1	9	MTT	216	S. Miller
	N1	10	MTT	212	Nicholas
	R1	1	MTT	212	Richey

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Balzac's PERE GORIOT, Dostoyevsky's CRIME AND PUNISHMENT,

Engl. 103. INTRODUCTION TO FICTION:- (Concluded).
E. M. Forster's A PASSAGE TO INDIA, and Hemingway's A FAREWELL TO ARMS. See note under Engl. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	211	Freyer
	C1	10	MWF	211	Kerwick
	E1	12	MWF	216	Blum
	F1	1	MWF	216	Hipple
	H1	3	MWF	216	Greenwald
	L1	8	MTT	216	Leonhard
	P1	11	MTT	211	Gallagher
	Q1	12	MTT	214	Runyan
	T1	3	MTT	214	Cassell

[1]Students with 95 or more credit hours receive only 2 hours credit.

Engl. 113. AMERICAN LITERATURE:- Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	A1	8	MWF	212	Wright
	Q1	12	MTT	212	Halperin

Engl. 114. AMERICAN LITERATURE:- Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	B1	9	MWF	212	Wright
	P1	11	MTT	212	Karanikas

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, RASSELAS. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for Engl. 121 in addition to Engl. 101, 102, and 103. This course, plus Engl. 122 and 123 satisfies the humanities requirement in general education. Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	F1	1	MWF	215	Atwood

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, FitzGerald's THE RUBAIYAT OF OMAR KHAYYAM, readings from T. H. Huxley, Browning's poems, and, one novel. See note under Engl. 121. Prerequisite: Sophomore standing or exemption from Rhet. 102.

3 hours	D1	11	MWF	215	Griest

Engl. 123. CHIEF MODERN ENGLISH WRITERS:- Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. See note under Engl. 121. Prerequisite: Sophomore standing or exemption from Rhet. 102.

Credit	Section	Hours	Days	Room	Instructor
3 hours	E1	12	MWF	215	Waller

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing, or exemption from Rhet. 102.

3 hours	C1	10	MWF	215	Vest

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. No credit for graduation is given for French 101 without French 102.

4 hours[1]	A1	8	TWTF	226	Skogen
	B1	9	TWTF	224	Lenihan
	C1	10	TWTF	226	Skogen
	D1	11	TWTF	224	Cowles
	E1	12	TWTF	228	Lein
	H1	3	TWTF	226	Lein
	J1	4	TWTF	226	Lein

[1]Students with 95 or or more credit hours receive only 3 hours credit.

French 102. ELEMENTARY COURSE:- Continuation of French 101. Prerequisite: French 101, or one year of high school French.

4 hours[1]	B1	9	TWTF	226	Skogen
	C1	10	TWTF	224	Lenihan
	E1	12	TWTF	226	Skogen
	F1	1	TWTF	224	Cowles
	H1	3	TWTF	228	Cowles

[1]Students with 95 or more credit hours receive only 3 hours credit.

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102, of two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	E1	12	TWTF	224	Cowles

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103, or three years of high school French.

4 hours	C1	10	TWTF	228	Schuyler
	F1	1	TWTF	228	Lein

French 202. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104, or four years of high school French.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	B1	10-12	MWF	135
	B3	10-12	MWF	137
	C1	12-2	MWF	135
	D1	2-4	MWF	135
	E1	4-6	MWF	135
	E3	4-6	MWF	137
	F1	8-11	TT	135
	F3	8-11	TT	137
	G1	11-2	TT	135

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane geometry.

3 hours	A3	8-10	MWF	137
	A4	8-10	MWF	141
	A5	8-10	MWF	143
	B2	10-12	MWF	136
	B4	10-12	MWF	141
	B5	10-12	MWF	143
	B6	10-12	MWF	145
	C2	12-2	MWF	136
	C3	12-2	MWF	137
	C4	12-2	MWF	141
	C5	12-2	MWF	143
	D2	2-4	MWF	136
	D3	2-4	MWF	137
	D4	2-4	MWF	141
	D5	2-4	MWF	143
	E2	4-6	MWF	136
	E4	4-6	MWF	141

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145
	C6	12-2	MWF	145
	G6	11-2	TT	145

G. E. 108. ARCHITECTURAL PROJECTIONS:- Prerequisite: G. E. 107.

Credit	Section	Hours	Days	Room	Instructor
2 hours	A7	8-10	MWF	146	
	C7	12-2	MWF	146	
	D7	2-4	MWF	146	
	F7	8-11	TT	146	
	G7	11-2	TT	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prequisite: G. E. 101 and 102.

2 hours	B7	10-12	MWF	146	

G. E. 112. ADVANCED DRAFTING FOR MECHANICAL ENGINEERS:- Prerequisite: G. E. 101 and 102.

2 hours	F2	8-11	TT	136	
	G2	11-2	TT	136	

G. E. 203. AIRCRAFT DRAFTING AND LOFTING:- Prerequisite: G. E. 101 and 102.

3 hours	G5	11-2	TT	143	

G. E. 210. INDUSTRIAL PRODUCTION ILLUSTRATION:- Prerequisite: G. E. 102 or 107 and 108.

3 hours	D6	2-4	MWF	145	

G. E. 212. GRAPHICAL CALCULATIONS:- Prerequisite: G. E. 101, Math. 123.

1 hour	A1	9-10	MW	136	
	B1	9-10	MF	136	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climates, climatic regions, landforms, natural resources. Geog. 101 and 111 meet the general education requirement in the physical sciences, and Geog. 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences.

5 hours[1]	Lec. M1	9	TT	218	Finney-Cutshall
	Quiz A1	8	MWF	14	Finney
	Quiz B1	9	MWF	13	Finney
	Quiz D1	11	MWF	13	Finney

[1]Students with 95 or more credit hours receive only 4 hours credit.

Geog. 101. ELEMENTS OF GEOGRAPHY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz G1	2	MWF	14	Finney
	Quiz R1	1	M	13	Cutshall
		1	TT	16	

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world: regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geog. 101 or consent of instructor.

3 hours[1]	M1	9	MTT	14	Colby
	Q1	12	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others.

3 hours[1]	Q1	12	MTu	13	Cutshall
		12	Th	17	Cutshall

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere, its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Prerequisite: Geog. 101 or consent of instructor.

3 hours	A1	8	MWF	13	Rheumer
	C1	10	MWF	13	Rheumer
	G1	2	MWF	13	Rheumer
	R1	12	Th	13	Rheumer
		1	TT	13	Rheumer

Geog. 114. CONSERVATION OF NATURAL RESOURCES:- Regional aspects of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis on the United States. Prerequisite: Sophomore standing.

3 hours	D1	11	MWF	14	Rheumer

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geol. 101 102 meet the general education requirement in the physical sciences.

Geol. 101. PHYSICAL GEOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R	1	TT	204	Karpinski
	Lab. 1	8-10	Tu	42	Karpinski
	Quiz 1	8	Th	42	Karpinski
[1]Students with 95	Lab. 2	9-11	Th	42	Karpinski
or more credit hours	Quiz 2	10	Tu	42	Karpinski
receive only 3 hours	Lab. 3	11-1	M	42	Karpinski
credit.	Quiz 3	11	W	42	Karpinski
	Lab. 4	3-5	M	42	Krinsley
	Quiz 4	4	W	42	Krinsley
	Lab. 5	3-5	Th	42	Kurs
	Quiz 5	3	Tu	42	Kurs

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geol. 101 or Division of General Studies 141.

4 hours[1]	Lec. N	10	TT	65	Krinsley
	Lab. 11	11-1	F	42	Krinsley
	Quiz 11	12	W	42	Krinsley
[1]Students with 95	Lab. 12	12-2	Th	42	Krinsley
or more credit hours	Quiz 12	1	Tu	42	Krinsley
receive only 3 hours credit.					

Geol. 132. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: Geol. 131.

3 hours	A	8-10	MWF	42-53	Kurs

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	C	10	MWF	42	Karpinski
	F	1	MWF	42	Kurs
	G	2	MWF	42	Kurs

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have offered for entrance high school credit in this language. No credit toward graduation is given for German 101 without 102.

4 hours[1]	A1	8	TWTF	220	Fuller
	B1	9	TWTF	220	Fuller

[1]Students with 95 or more credit hours receive only 3 hours credit.

German 101. ELEMENTARY COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C1	10	TWTF	220	Kauf
	D1	11	TWTF	220	Teichmann
	E1	12	TWTF	220	Teichmann
	E2	12	TWTF	222	Willner
	F1	1	TWTF	220	Braunfeld
	H1	3	TWTF	220	Willner

German 102. ELEMENTARY COURSE:- Continuation of German 101. Oral practice, reading, and grammar. Prerequisite: German 101 or one year of high school German.

4 hours[1]	A1	8	TWTF	221	Hartoch
	B1	9	TWTF	221	Hartoch
	C1	10	TWTF	221	Hartoch
[1]Students with 95	D1	11	TWTF	221	Kauf
or more credit hours	E1	12	TWTF	221	Fuller
receive only 3 hours	E2	12	TWTF	209	Braunfeld
credit.	F1	1	TWTF	221	Kauf
	H1	3	TWTF	221	Teichmann
	J1	4	TWTF	221	Braunfeld

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

4 hours	B1	9	TWTF	222	Kauf
	D1	11	TWTF	222	Willner
	F1	1	TWTF	222	Willner

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, three years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Vardaman
	C1	10	TWTF	223	Fuller
	E1	12	TWTF	223	Hartoch
	F1	1	TWTF	223	Teichmann
	H1	3	TWTF	223	Braunfeld

German 210. MASTERPIECES OF GERMAN LITERATURE:- Introduction to German literature, in subjects, forms, and ideals. Prerequisite: German 104, 144, two years of college German, or equivalent.

3 hours	D1	11	MWF	223	Vardaman

HISTORY

Hist. 112. HISTORY OF WESTERN CIVILIZATION, 1815 TO THE PRESENT:- Development of European nationalism, liberalism, and imperialism; World Wars I and II; reconstruction. (Lectures and quiz sections in this course are coordinate. The quiz section must be chosen from one of the group listed directly beneath the particular lecture hour selected).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. N1	10	TT	218	Nicholson
	Quiz C1	10	WF	94	Nicholson
	Quiz D1	11	WF	94	Nicholson
[1]Students with 95	Quiz P1	11	TT	21	Goodman
or more credit hours	Quiz Q1	12	TT	21	Nicholson
receive only 3 hours	Quiz R1	1	TT	20	Goodman
credit.	Quiz T1	3	TT	21	Goodman
	Lec. F1	1	WF	218	Unfer
	Quiz B1	9	WF	23	Unfer
	Quiz D2	11	WF	22	Unfer
	Quiz M1	9	TT	21	Unfer
	Quiz N1	10	TT	21	Unfer
	Quiz R2	1	TT	21	Unfer

Hist. 132. HISTORY OF ENGLAND, 1688 TO THE PRESENT:- A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1688 to the present.

4 hours[1]	P1	11	MTWT	97	S. Jones
	R1	1	MTWT	97	S. Jones

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO THE PRESENT:- A century of national life and organization. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	S. Jones
	Quiz C1	10	WF	82	Bill
	Quiz D1	11	WF	82	Bill
	Quiz E1	12	WF	17	Bill
	Quiz G1	2	MW	97	S. Jones
	Quiz M1	9	TT	97	Bill
	Quiz N1	10	TT	97	S. Jones

Hist. 182. THE ANCIENT WORLD:- Rome. Prerequisite: Sophomore standing.

3 hours	F1	1	WF	94	Nicholson
		2	F	94	Nicholson

Humanities 102. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. This course plus Humanities 101 satisfies the general education requirement in the Humanities. Prerequisite: Humanities 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	B1	9	TWTF	209	Blum
	F1	1	TWTF	211	Kogan

[1]Students with 95 or more credit hours receive only 3 hours credit.

Humanities 152. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, or 103. This course plus Humanities 151 satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	C1	10	TWTF	209	Vardaman
	F1	1	TWTF	209	Schiller

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Staff: Drs. Erskine, Reid, Kostka, Schuckmell, Halpin, Wallk, Linosani, Kruse, Lindsay, Lyon, Mabalinga and Bucheleris.

2 hours[1]

[1]Students with 95 or more credit hours receive only 1 hour credit.

(For Women)				
N	10	TT	213	Staff
P	11	TT	213	Staff
C	10	WF	213	Staff
(For Men)				
A	8	MW	213	Staff
B	9	MW	213	Staff
F	12	MW	213	Staff
H2	3	MW	210	Staff
G	2	MW	213	Staff
J2	4	MW	210	Staff
L	8	TT	213	Staff

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	L2	8	TT	251	Staff
	M	9	TT	213	Staff
	M2	9	TT	251	Staff
	N	10	TT	251	Staff
	P	11	TT	251	Staff
	Q	12	TT	213	Staff
	R	1	TT	213	Staff
	T	3	TT	213	Staff
	T2	3	TT	251	Staff
	U	4	TT	213	Staff
	U2	4	TT	251	Staff

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	D	11	WF	213	Staff
[1]Students with 95 or more credit hours receive only 1 hour credit.	(For Men and Women)				
	H	3	MW	213	Staff
	J	4	MW	213	Staff

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours[1]	P	11	TT	22	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	24	Gillett
	G1	2	MWF	22	Gillett
	H1	3	MWF	21	J. R. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	B1	9	MWF	19	Knudson
	F1	1	MWF	20	Knudson
	T1	3	MTT	18	Larson

MATHEMATICS

Math. 101. BASIC MATHEMATICS:- A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry.

3 hours	B1	9	MWF	102	Olsen
	G1	2	MWF	106	Ragland

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	100	Iverson
	A2	8	MTWTF	101	Ockert
	A3	8	MTWTF	102	Sjoblom
	B1	9	MTWTF	100	Deniston
	B2	9	MTWTF	101	Sjoblom
	B3	9	MTWTF	103	Lumley
	C1	10	MTWTF	100	Feinstein
	C2	10	MTWTF	101	Murphy
	C3	10	MWF	103	Stelling
	D1	11	MTWTF	100	
	D2	11	MTWTF	101	Berglund
	E1	12	MTWTF	100	Olsen
	E2	12	MTWTF	101	Ondrak
	E3	12	MWF	102	Iverson
	F1	1	MTWTF	100	Nolan
	F2	1	MTWTF	101	C. S. Mann
	F3	1	MWF	104	Ziomek

[1] Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	G1	2	MWF	100	Alberti
	H1	3	MTWTF	100	Pennisi
	H2	3	MTWTF	101	Wiley
	H3	3	MTWTF	111	Lariviere
	H4	3	MWF	97	Scholomiti
	J1	4	MTWTF	100	Ziomek
	J2	4	MTWTF	101	Hill
	J3	4	MTWTF	106	Gordon
	J4	4	MTWTF	103	Esterhammer
	M1	9	M	96	Vedral
			TT	102	

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS: - This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No Credit	A1	8	MWF	96	Lumley
	C1	10	MWF	110	C. S. Mann
	Q1	12	M	76	C. S. Mann
			TT	102	

Math. 110. FUNDAMENTALS OF MATHEMATICS: - For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Math. 109 and 110 meet the physical science requirements in general education in Liberal Arts and Sciences. Prerequisite: Math. 109.

4 hours	D1	11	MTWT	102	Hartley

Math. 112. COLLEGE ALGEBRA: - Prerequisite: Entrance algebra, 1½ units, or Math. 103; plane geometry, 1 unit, or Math. 108.

3 hours[1]	A1	8	MWF	103	Deniston
	A2	8	MWF	104	
	B1	9	MWF	104	Stelling
	B2	9	MWF	144	Nolan
	*C1	10	MWF	104	Berglund
	*D1	11	MWF	103	Ockert
	*E1	12	MWF	103	Esterhammer
	E2	12	MWF	104	Vedral
	*F1	1	MWF	111	Esterhammer
	F2	1	MWF	102	Ondrak
	G1	2	MWF	101	Wiley
	*G2	2	MWF	102	Berglund

[1]Students with 95 or more credit hours receive only 2 hours credit.

*For Commerce students only.

Math. 112. COLLEGE ALGEBRA: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	G3	2	MWF	103	C. S. Mann
	*H1	3	MWF	103	Ziomek
	H2	3	MWF	102	Gordon
	H3	3	MWF	110	Ragland
	J1	4	MWF	102	Wiley
	N1	10	M	96	Frank
			TT	102	
	N2	10	M	94	Iverson
			TT	110	
	P1	11	F	102	Ragland
			TT	111	
	Q1	12	M	80	Gordon
			TT	110	
	R1	1	M	76	Murphy
			TT	102	
	R2	1	M	80	Gordon
			TT	110	
	T1	3	F	96	Esterhammer
			TT	102	
	U1	4	MTT	104	Alberti

Math. 114. PLANE TRIGONOMETRY: - Prerequisite: Entrance algebra, 1½ units, or Math 103; plane geometry, 1 unit, or Math 108.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	L1	8	TT	103	Scholomiti
	L2	8	TT	104	Deniston
	M1	9	TT	110	Olsen
	M2	9	TT	104	Stelling
	N1	10	TT	103	Ballard
	N2	10	TT	104	Ockert
	P1	11	TT	103	Stelling
	P2	11	TT	104	Ondrak
	Q1	12	TT	103	Ziomek
	Q2	12	TT	104	Nolan
	R1	1	TT	111	Lariviere
	R2	1	TT	104	Wiley
	T1	3	TT	103	Hill
	T2	3	TT	104	Scholomiti
	T3	3	TT	110	Ziomek
	U1	4	TT	102	Wiley

[1]Students with 95 or more credit hours receive only 1 hour credit.

Math. 123. ANALYTIC GEOMETRY: - Plane and solid analytic geometry. Prerequisite: Math. 111 or 112, and 114 or 115.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	A1	8	MTWTF	105	Vedral
	A2	8	MTWTF	106	Stelling

[1]Students with 95 or more credit hours receive only 4 hours credit.

Math. 123. ANALYTIC GEOMETRY: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B1	9	MTWTF	105	Ballard
	B2	9	MTWTF	106	Ockert
	C1	10	MTWTF	105	Olsen
	C2	10	MTWTF	106	Nolan
	D1	11	MTWTF	105	Deniston
	D2	11	MTWTF	106	Scholomiti
	E1	12	MTWTF	105	Curtis
	E2	12	MTWTF	106	Dinkines
	F1	1	MTWTF	105	Ragland
	F2	1	MTWTF	106	Hill
	H1	3	MTWTF	105	Alberti
	J1	4	MTWTF	111	Lariviere

Math. 133. CALCULUS: - First course for students of mathematics and engineering. Prerequisite: Math. 122 or 123.

3 hours	A1	8	MWF	110	Scholomiti
	B1	9	MWF	110	Iverson
	C1	10	MWF	102	Hartley
	D1	11	MWF	104	Murphy
	E1	12	MWF	134	Alberti
	F1	1	MWF	110	Berglund
	F2	1	MWF	104	Feinstein
	G1	2	MWF	110	Pennisi
	G2	2	MWF	104	Murphy
	H1	3	MWF	104	Hill

Math. 143. CALCULUS: - Second course for students of mathematics and engineering. Prerequisite: Math. 133.

5 hours	B1	9	MTWTF	111	Ondrak
	C1	10	MTWTF	111	Curtis
	D1	11	MTWTF	110	Frank
	E1	12	MTWTF	111	Feinstein
	F1	1	MTWTF	103	Pennisi
	H1	3	MTWTF	106	Dinkines

Math. 147. CALCULUS: - Continuation of Math. 137. Prerequisite: Math. 137.

3 hours	D1	11	MWF	111	Vedral

Math. 161. STATISTICS: - Prerequisite: Math. 111 or 112; sophomore standing.

3 hours	G1	2	MWF	111	Lariviere

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS: - Prerequisite: Math. 132 and 142, or 137 and 147.

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	111	Curtis
	E1	12	MWF	110	Frank
	G1	2	MWF	105	Dinkines

MECHANICAL ENGINEERING

M. E. 171. MECHANISM: - Prerequisite: Credit or registration in Physics 106.

2 hours	F4	9-11	TT	141	Cramer
	G4	12-2	TT	141	Cramer

M. E. 182. MANUFACTURING PROCESSES: - Prerequisite: Sophomore standing in aeronautical engineering or consent of instructor.

3 hours	B1	9	MWF	65	Perkins

M. E. 183. MATERIALS CASTING: - Prerequisite: Sophomore standing.

3 hours	Lec. C	10	MF	65	Perkins-Schroeder
	Lec. F	1	MF	65	Perkins-Schroeder
	Lab. A	8-11	Tu	71	
	Lab. B	11-2	W	71	
	Lab. C	2-5	W	71	

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing.

3 hours	Lec. P	11	TT	65	Perkins-Schroeder
	Lec. G	2	MF	65	Perkins-Schroeder
	Lab. A	11-2	M	64	
	Lab. B	11-2	F	64	
	Lab. C	11-2	W	64	

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 108 and Math. 143.

3 hours	H1	3	MW	123	Futral
		3-5	F	123	Futral

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:- Individual weapons and marksmanship; combat formations; tactics of the rifle squad; first aid and hygiene; and leadership, drill, and exercise of command. Students must register in one theory section and in one drill period. Prerequisite: Approval of the Military Science Department.

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	116	McClenahan
	Theory 2X	9	TT	116	McClenahan
	Theory 3X	10	MW	116	McClenahan
	Theory 4X	10	TT	116	McClenahan
	Theory 5X	11	MW	116	O'Neill
	Theory 6X	11	TT	116	O'Neill
	Theory 7X	1	MW	116	O'Neill
	Drill 1	2	M	189	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 104. SOPHOMORE BASIC DRILL AND THEORY:- Weapons; maps and aerial photographs; mine warfare; technique of fire of rifle squads; scouting and patrolling; tactics of weapons squads and sections; and leadership, drill, and exercise of command. Students must register in one theory section and in one drill period. Prerequisites: Mil. Sci. 101 and Mil. Sci. 102 or approval of the Military Science Department.

1 hour	Theory 1X	9	MW	230	DeRoche
	Theory 2X	9	TT	230	DeRoche
	Theory 3X	11	MW	230	DeRoche
	Theory 4X	10	TT	230	DeRoche
	Drill 1	2	M	189	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 206. ADVANCED INFANTRY:- Communications; combat intelligence; estimate of situation and combat orders; field fortifications; tactics of rifle and heavy weapons platoons and companies; maps and aerial photographs; and leadership, drill, and exercise of command. Students must register in four-hour theory course and in one drill period. Prerequisite: Mil. Sci. 103 and 104, successful completion of Armed Forces qualification tests, officer-type physical examination, and approval of Military Science Department.

3 hours	Theory X	12	MTWT	206	McClenahan
	Drill 1	2	M	189	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

MUSIC

University Band: - The study and performance of a variety of band literature with public performances in the form of concerts, convocations, and selected University functions. Band instruments of most kinds are available for free use by students. Admission by consent of the director.

Credit	Section	Hours	Days	Room	Instructor
No credit	UB	*2	TT	354	Zahrt

*Rehearsals often continue for a part or all of the three o'clock hour for those able to arrange their schedules to permit this, but while attendance during the three o'clock hour is desired, it is not required.

University Choir: - Rehearsal and public performance of standard choral works; training in sight singing. Admission by consent of the director.

No credit	D1	11	MTT	354	Scalin

University Orchestra: - The study and public performance of selected literature for the concert orchestra. Some instruments are available for free use by students. Admission by consent of the director.

No credit	UO	*1	Tu	354	Zahrt
		*12	Th	354	Zahrt

*Students who are unable to attend both meetings may enroll for one or the other with the consent of the director.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY: - Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	94	Page
	E1	12	MWF	97	Page
	T1	3	M	28	D. Morris
			TT	24	

Phil. 102. LOGIC: - Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	94	Page
	E1	12	MWF	82	D. Morris
	F1	1	MWF	82	D. Morris

Phil. 102. LOGIC:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Q1	11	Tu	23	D. Morris
		12	TT	23	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Phil. 103 and 105. Prerequisite: Sophomore standing.

2 hours	P1	11	TT	19	Page
	R1	1	TT	96	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P.E.M. 101. Students enrolling for second, third, or fourth time should register for P.E.M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Rader
	D	11	MWF	Gym	Kristufek
	E	12	MWF	Gym	L. H. Miller
	F	1	MWF	Gym	Fordham

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hour	A	8	MWF	Gym	Rader
	B	9	MWF	Gym	Maksud
	C	10	MWF	Gym	Frey
	D	11	MWF	Gym	Versen
	E	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Kristufek
	G	2	MWF	Gym	Gedvilas
	H	3	MWF	Gym	Montcalm

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period.

1 hour	Lm	*8	TT	Town Club	Kristufek

*Classes will meet for 1½ hours.

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period.

P. E. M. 109. ADVANCED SWIMMING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	Mn	*9	TT	Town Club	Kristufek

*Classes will meet for 1½ hours.

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	B	9	MWF	Gym	Bedard
	C	10	MWF	Gym	L. H. Miller
*Classes will meet	D	11	MWF	Gym	Bedard
for 1½ hours.	E	12	MWF	Gym	Frey
	G	2	MWF	Gym	Kreidler
	Pq	*11	TT	Gym	Frey
	Qr	*12	TT	Gym	Kreidler

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	F	1	MWF	Gym	Montcalm

P. E. M. 114. APPARATUS STUNTS:-

1 hour	D	11	MWF	Gym	Montcalm
	E	12	MWF	Gym	Bedard
*Classes will meet	F	1	MWF	Gym	Frey
for 1½ hours.	G	2	MWF	Gym	Montcalm
	H	3	MWF	Gym	Kreidler
**Students will be	Np	*10	TT	Gym	Frey
released early to	Rs	**1	TT	Gym	Montcalm
participate in extra-curricular activities.					

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Maksud
	D	11	MWF	Gym	Strnad
*Classes will meet	E	12	MWF	Gym	Kristufek
for 1½ hours.	F	1	MWF	Gym	Strnad
	Np	*10	TT	Gym	Maksud
**Students will be	Qr	*12	TT	Gym	Strnad
released early to	Rs	**1	TT	Gym	Strnad
participate in extra-curricular activities.					

P. E. M. 118. WRESTLING:-

1 hour	B	9	MWF	Gym	Versen
	C	10	MWF	Gym	Kristufek
	D	11	MWF	Gym	Maksud

P. E. M. 118. WRESTLING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
*Classes will meet for 1½ hours.	E	12	MWF	Gym	Strnad
	G	2	MWF	Gym	W. C. Mann
	H	3	MWF	Gym	W. C. Mann
**Students will be released early to participate in extra-curricular activities.	Pq	*11	TT	Gym	W. C. Mann
	Qr	*12	TT	Gym	Kristufek
	*Rs	**1	TT	Gym	Versen

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-

1 hour	F	1	MWF	Gym	Kreidler
	H	3	MWF	Gym	Strnad
*Classes will meet for 1½ hours.	*Rs	**1	TT	Gym	Kreidler

**Students will be released early to participate in extra-curricular activities.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	A	8	MWF	Gym	Maksud
	C	10	MWF	Gym	Bedard
*Classes will meet for 1½ hours.	D	11	MWF	Gym	L. H. Miller
	E	12	MWF	Gym	Kreidler
	F	1	MWF	Gym	Bedard
**Students will be released early to participate in extra-curricular activities.	G	2	MWF	Gym	Fordham
	Np	*10	TT	Gym	Versen
	Pq	*11	TT	Gym	Berrafato
	*Rs	**1	TT	Gym	Berrafato

P. E. M. 129. VOLLEYBALL:-

1 hour	A	***8	MWF	Gym	Versen
	B	***9	MWF	Gym	Rader
*Classes will meet for 1½ hours.	Lm	*8	TT	Gym	Maksud
	Mn	*9	TT	Gym	Rader
	Np	*10	TT	Gym	W. C. Mann
**Students will be released early to participate in extra-curricular activities.	Pq	*11	TT	Gym	Gedvilas
	Qr	*12	TT	Gym	Versen
	Rs	**1	TT	Gym	Frey

***Adaptive only.

P. E. M. 130. BEGINNING BASKETBALL:- Prerequisite: P.E.M. 106 and recommendation of instructor.

1 hour	C	10	MWF	Gym	Versen

P. E. M. 130. BEGINNING BASKETBALL:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D	11	MWF	Gym	Gedvilas
	F	1	MWF	Gym	Gedvilas

P. E. M. 132. ARCHERY:-

1 hour	Np	*10	TT	Gym	Rader

*Classes will meet for 1½ hours.

P. E. M. 136. BADMINTON:-

1 hour	Lm	*8	TT	Gym	Rader
	Mn	*9	TT	Gym	Maksud
*Classes will meet	Np	*10	TT	Gym	L. H. Miller
for 1½ hours.	Pq	*11	TT	Gym	Bedard
	Qr	*12	TT	Gym	Montcalm
**Students will be	Rs	**1	TT	Gym	Fordham

released early to participate in extra-curricular activities.

P. E. M. 139. BACKYARD SPORTS:-

1 hour	E	12	MWF	Gym	Rader
	G	***2	MWF	Gym	Strnad
*Classes will meet	H	***3	MWF	Gym	Gedvilas
for 1½ hours.	Pq	*11	TT	Gym	Kreidler

***Adaptive only.

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, paddles, etc.

1 hour	Qr	*12	TT	Gym	Gedvilas
	Rs	**1	TT	Gym	Gedvilas

*Classes will meet for 1½ hours.

**Students will be released early to participate in extra-curricular activities.

P. E. M. 142. BALLROOM DANCE:-

P. E. M. 142. BALLROOM DANCE: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	F	1	MWF	Audit.	

P. E. M. 150. PROFESSIONAL ORIENTATION: - For students majoring in physical education.

2 hours	D	11	WF	65	Fordham

P. E. M. 155. GYMNASTICS & WRESTLING: - For students majoring in physical education. (first eight weeks)

2 hours	A	*8	MTWTF	Gym	Frey-Mann

*Class will meet for 1½ hours.

P. E. M. 156. TRACK & FIELD, BASEBALL: - For students majoring in physical education. (second eight weeks)

2 hours	A	*8	MTWTF	Gym	Fordham- L. H. Miller

*Class will meet for 1½ hours.

Rec. 170. OUTDOOR RECREATIONAL SPORTS: - For students majoring in physical education. (first eight weeks)

2 hours	A	*8	MTWTF	Gym	Berrafato

*Class will meet for 1½ hours.

Rec. 171. INDOOR RECREATIONAL SPORTS: - For students majoring in physical education. (second eight weeks)

2 hours	A	*8	MTWTF	Gym	Berrafato

*Class will meet for 1½ hours.

Rec. 174. CAMP COUNSELING:- For students majoring in physical education.

3 hours	E	12	M WF	17 144	W. C. Mann

Rec. 176. PRINCIPLES OF RECREATION:- For students majoring in Physical Education.

3 hours	D	11	MWF	80	Berrafato

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	B1	9	MWF	Audit.	Anzalone
	B2	9	MWF	Audit.	Pesavento
*Classes meet	E	12	MWF	Audit.	Anzalone
for 1½ hours.	Np	*10	TT	Audit.	Anzalone
	Pq	*11	TT	Audit.	Anzalone

P. E. W. 102. MODIFIED ACTIVITIES:- (Open only to students assigned by Health Service).

1 hour	E	12	MWF	Audit.	Richardson

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	C	10	MWF	Audit.	Staff
	D	11	MWF	Audit.	Staff
*Classes meet	Np	*10	TT	Audit.	Staff
for 1½ hours.	Pq	*11	TT	Audit.	Staff
	Qr	*12	TT	Audit.	Staff

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisites: P.E.W. 105 or consent of instructor.

1 hour	*Rs	**1	TT	Audit.	Staff

*Classes meet for 1½ hours.

**Students will be released early to participate in extra-curricular activities.

P. E. W. 123. BASKETBALL:-

1 hour	Tu	*3	TT	Audit.	N. Richardson

*Classes meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:-

1 hour	F	1	MWF	Audit.	N. Richardson
	G	2	MWF	Audit.	N. Richardson

P. E. W. 125. SOFTBALL:-

1 hour	Mn	*9	TT	Audit.	Anzalone

*Classes meet for 1½ hours.

P. E. W. 130. BADMINTON:- Students to furnish own equipment.

Credit	Section	Hours	Days	Room	Instructor
1 hour	H	3	MWF	Audit.	N. Richardson

P. E. W. 131. GOLF:- Students to furnish own equipment.

1 hour	Qr	*12	TT	Audit.	Pesavento

*Classes meet for 1½ hours.

P. E. W. 132. BOWLING:- Students to furnish own equipment.

1 hour	*Rs	**1	TT	Abbott Hall	Anzalone

*Classes meet for 1½ hours.

**Students will be released early to participate in extra-curricular activities.

P. E. W. 134. TENNIS-ARCHERY: - Students to furnish own equipment.

1 hour	*Rs	**1	TT	Audit.	N. Richardson

*Classes meet for 1½ hours.

**Students will be released early to participate in extra-curricular activities.

P. E. W. 142. BALLROOM DANCE:

1 hour	F	1	MWF	Audit.	Anzalone

P. E. W. 152. BASKETBALL & SOFTBALL: - (Professional Course).

1 hour	D	11	MTWTF	Audit.	Pesavento

P. E. W. 154. TUMBLING, APPARATUS & TENNIS: - (Professional Course).

2 hours	C	10	MTWTF	Audit.	Pesavento

Dance 160. BEGINNING CONTEMPORARY DANCE: - (Professional Course).

2 hours	B	9	MTWTF	Audit.	Staff

Dance. 236. FOLK DANCE: - (Professional Course).

1 hour	E	12	MWF	Audit.	Barton

PHYSICAL SCIENCES

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirement in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and coordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Phys. Sci. 101-102 and D.G.S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. M	9	TT	204	Meloy
	Lab. 1	1-4	M	85	R. L. Miller
	Quiz 1	3	Th	75	R. L. Miller
	Lab. 2	10-1	Tu	85	R. L. Miller
	Quiz 2	12	F	74	R. L. Miller

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- A continuation of Phys. Sci. 101. Credit will not be given for both Phys. Sci. 101-102 and D.G.S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: Phys. Sci. 101.

4 hours	Lec. B	9	WF	204	Meloy
	Lab. 11	9-12	M	85	Cowin
	Quiz 11	9	Th	76	Cowin
	Lab. 12	2-5	W	85	Meloy
	Quiz 12	2	M	74	Meloy
	Lab. 13	12-3	F	85	Cowin
	Quiz 13	1	W	75	Cowin

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Prerequisite: Math. 114.

5 hours	Lec. X	11	Tu	127	Staff
	Quiz D1	11	MWF	144	Livermore
	Lab. D	8-11	Th	122	Livermore
	Quiz F1	1	MWF	123	Silkett
	Lab. F	3-6	Tu	122	Silkett
	Quiz H1	3	MWF	134	Moulton
	Lab. H	3-6	Th	122	Moulton

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. X	11	Th	127	Staff
	Quiz B1	9	MWF	123	Silkett
	Lab. B	8-11	Th	124	Silkett

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz C1	10	MWF	123	Johnson
	Lab. C	8-11	Tu	124	Johnson
	Quiz G1	2	MWF	134	Livermore
	Lab. G	3-6	Tu	124	Livermore
	Quiz H1	3	MWF	144	Kromhout
	Lab. H	3-6	Th	124	Kromhout

Physics 106. GENERAL PHYSICS. (MECHANICS):- Prerequisite: Credit or registration in Math. 133.

4 hours	Lec. X	9	M	127	Staff
	Lec. Y	11	M	127	Staff
	Lec. Z	2	M	127	Staff
	Quiz L1	8	TT	134	Sachs
	Lab. L	8-11	F	117	Sachs
	Quiz B1	9	WF	134	Minkler
	Lab. B	8-11	Tu	117	Minkler
	Quiz M1	9	TT	134	Skadeland
	Lab. M	8-11	W	117	Skadeland
	Quiz C1	10	WF	134	Stell
	Lab. C	3-6	Th	117	Stell
	Quiz D1	11	WF	134	Minkler
	Lab. D	8-11	Th	117	Minkler
	Quiz P1	11	TT	134	Sachs
	Lab. P	3-6	M	117	Sachs
	Quiz Q1	12	TT	134	Jantzen
	Lab. Q	12-3	F	117	Jantzen
	Quiz F1	1	WF	134	Stell
	Lab. F	3-6	Tu	117	Stell
	Quiz R1	1	TT	134	Price
	Lab. R	12-3	W	117	Price
	Quiz T1	3	TT	134	Jantzen
	Lab. T	3-6	W	117	Jantzen

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- Prerequisite: Physics 106. Credit or registration in Math. 143.

4 hours	Lec. X	11	W	127	Staff
	Lec. Y	2	W	127	Staff
	Quiz L1	8	TT	123	Skadeland
	Lab. L	8-11	F	124	Skadeland
	Quiz M1	9	TT	144	Railsback
	Lab. M	8-11	M	124	Railsback
	Quiz P1	11	TT	123	Jantzen
	Lab. P	12-3	M	124	Jantzen
	Quiz Q1	12	TT	123	McNeil
	Lab. Q	3-6	W	124	McNeil

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz R1	1	TT	123	Stell
	Lab. R	3-6	M	124	Stell
	Quiz T1	3	TT	123	Anderson
	Lab. T	12-3	F	124	Anderson

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- Prerequisite: Physics 106. Credit or registration in Math. 143.

4 hours	Lec. X	11	F	127	Staff
	Lec. Y	1	F	127	Staff
	Quiz M1	9	TT	113	Sachs
	Lab. M	8-11	W	122	Sachs
	Quiz N1	10	TT	134	Anderson
	Lab. N	8-11	M	122	Anderson
	Quiz Q1	12	TT	144	Minkler
	Lab. Q	12-3	M	122	Minkler
	Quiz R1	1	TT	144	Johnson
	Lab. R	3-6	W	122	Johnson
	Quiz T1	3	TT	144	McNeil
	Lab. T	3-6	M	122	McNeil

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus.

4 hours	Quiz G1	2	MWF	207	Kromhout-Moulton
	Lab. G	3-6	Tu	207	Kromhout-Moulton

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	B1	9	MWF	97	Gabis

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- A survey course covering such topics as the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems and organizations involved in maintaining peace.

3 hours	M1	9	MTT	28	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development of national and state governments; the federal system; national and state constitutions; civil and political rights; party systems; nature, structure, powers, and procedure of legislative, executive and judicial departments in state and nation. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	82	Israel
	B1	9	MWF	82	Israel
	D1	11	MWF	28	Gabis
	R1	1	TT	23	Gabis
		12	Th	22	Gabis
	T1	3	MTT	14	Gabis

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; police power; regulation of commerce, communicati and business; promotion of social and economic welfare; current problems. Prerequisite: Pol. Sci. 150, or consent of department.

3 hours	E1	12	MWF	28	Gabis
	N1	10	M	28	Barber
			TT	24	

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. (Lectures and quiz sections in this course are coordinate. The quiz section must be chosen from one of the group listed directly beneath the particular lecture hour selected). Prerequisite: Second semester freshman standing.

4 hours	Lec. B1	9	WF	218	Howard
	Quiz C1	10	WF	23	Fredian
	Quiz M1	9	TT	16	Howard
	Quiz N1	10	TT	16	Howard
	Quiz P1	11	TT	96	Fredian
	Lec. P1	11	TT	218	Lipman
	Quiz D1	11	WF	16	Fredian
	Quiz E1	12	WF	94	
	Quiz F1	1	WF	25	Fredian
	Quiz G1	2	WF	28	Fredian
	Quiz Q1	12	TT	96	Fredian

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:- Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Econ. 170 or Math. 161. Prerequisite: Psych. 100, 103, or 106.

Credit	Section	Hours	Days	Room	Instructor
3 hours	G1	2	MWF	96	Eells

Psych. 145. INDUSTRIAL PSYCHOLOGY:- A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Prerequisite: Psych. 100.

3 hours	E1	12	MWF	96	Howard
	F1	1	MWF	96	Howard

Psych. 150. PERSONALITY AND HUMAN RELATIONS:- An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Prerequisite: Psych. 100 or equivalent.

3 hours	Lec. C1	10	WF	218	Lipman
	Quiz M1	9	Tu	19	Lipman
	Quiz N1	10	Tu	19	Lipman
	Quiz E1	12	M	14	Fredian
	Quiz F1	1	M	94	Fredian

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhet. 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhet. 101 without further examination.

No credit	A1	8	MWF	201	Kenny
	B1	9	MWF	201	Kenny
*Admission by consent of Division of Humanities.	C1	10	MWF	201	Kenny
	D1	11	MWF	201	Hegie
	E1	12	MWF	203	Kenny
	*E2	12	MTWTF	201	Kirstein-Hoskins
	F1	1	MWF	202	Carlson
	*F2	1	MTWTF	201	Kirstein-Hoskins
	G1	2	MWF	202	Hegie
	H1	3	MWF	201	Carlson
	L1	8	MTT	202	Chillag
	M1	9	MTT	202	Chillag

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	N1	10	MTT	202	Timmis
	Q1	12	MTT	202	Chillag
	R1	1	MTT	203	Timmis
	T1	3	MTT	202	Timmis

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Prerequisite: A passing grade on the placement examination or a passing grade in Rhet. 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	203	Atwodd
	A2	8	MWF	205	Griest
	B1	9	MWF	203	Griest
	B2	9	M	221	I. Miller
			WF	205	
	C1	10	MWF	203	Freyer
	C2	10	MWF	229	F. Johnson
	C3	10	M	221	McNamara
			WF	216	
	D1	11	MWF	202	Kerwick
	D2	11	MWF	203	I. Miller
	D3	11	M	221	Niederman
			WF	209	
	E1	12	MWF	205	Freyer
	E2	12	MWF	206	McNamara
	E3	12	M	209	Cox
			WF	211	
	F1	1	M	211	Stronks
			WF	212	
	F2	1	MWF	206	I. Miller
	G1	2	MWF	203	Jordan
	G2	2	MWF	220	Greenwald
	G3	2	MWF	206	Kirstein
	G4	2	MWF	209	Niederman
	G5	2	MWF	212	Schiller
	G6	2	MWF	216	Kerwick
	H1	3	MWF	203	Hipple
	H2	3	MWF	205	Niederman
	H3	3	MWF	206	Kerwick
	H4	3	MWF	209	Hegie
	H5	3	MWF	211	Heiserman
	J1	4	MWF	201	Hipple
	J2	4	MWF	202	Greenwald
	J3	4	MWF	203	Hegie
	J4	4	MWF	206	
	J5	4	MWF	205	Cox
	L1	8	MTT	206	Nicholas
	L2	8	MTT	209	S. Miller

[1] Students with 95 or more credit hours receive only 2 hours credit.

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	M1	9	MTT	206	Gallagher
	M2	9	MTT	229	Nicholas
	M3	9	MTT	205	Jackman
	N1	10	MTT	216	S. Miller
	N2	10	M	209	Halperin
			TT	211	
	P1	11	MTT	209	Schiller
	Q1	12	MTT	211	S. Miller
	Q2	12	MTT	229	Leonhard
	R1	1	MTT	229	Gallagher
	R2	1	MTT	217	Runyan
	R3	1	M	228	
			TT	214	
	T1	3	MTT	212	Richey
	U1	4	MTT	209	Richey

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Prerequisite: Rhet. 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	229	Mackin
	A2	8	MWF	228	McNamara
	B1	9	M	222	Atwood
			WF	202	
	B2	9	M	209	Vest
			WF	215	
	B3	9	M	223	McNamara
			WF	216	
	C1	10	M	224	Atwood
			WF	206	
	C2	10	M	223	Love
			WF	212	
	C3	10	M	225	Mackin
			WF	202	
	D1	11	M	222	Waller
			WF	211	
	D2	11	MWF	206	Hipple
	D3	11	M	224	Jordan
			WF	212	
	D4	11	MWF	226	Carlson
	D5	11	MWF	229	Heiserman
	E1	12	M	228	Wright
			WF	229	
	E2	12	M	227	Greenwald
			WF	214	
	E3	12	M	224	Griest
			WF	212	

[1]Students with 95 or more credit hours receive only 2 hours credit.

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	MWF	227	Love
	F2	1	M	223	Mackin
			WF	229	
	G1	2	MWF	223	Waller
	G2	2	MWF	224	Heiserman
	G3	2	MWF	225	Love
	G4	2	MWF	226	
	G5	2	MWF	217	Abrahamson
	G6	2	MWF	227	Carlson
	G7	2	MWF	228	Blum
	G8	2	MWF	221	Cox
	H1	3	MWF	224	Waller
	H2	3	MWF	229	
	H3	3	MWF	222	Jordan
	H4	3	M	221	Abrahamson
			WF	202	
	H5	3	M	223	Cox
			WF	214	
	J1	4	MWF	212	Abrahamson
	L1	8	MTT	219	Halperin
	L2	8	MTT	222	Runyan
	M1	9	M	224	Runyan
			TT	214	
	M2	9	M	225	Halperin
			TT	203	
	N1	10	M	226	Kogan
			TT	205	
	N2	10	M	227	Gallagher
			TT	203	
	N3	10	M	228	Karanikas
			TT	214	
	P1	11	M	227	Kogan
			TT	214	
	Q1	12	M	223	Cassell
			TT	216	
	Q2	12	M	225	Nicholas
			TT	206	
	Q3	12	M	226	Richey
			TT	215	
	Q4	12	M	222	Timmis
			TT	203	
	Q5	12	M	221	J. Johnson
			TT	205	
	R1	1	M	224	Cassell
			TT	215	
	R2	1	M	225	Karanikas
			TT	226	
	R3	1	M	209	J. Johnson
			TT	206	

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	T1	3	M	228	Kogan
			TT	229	
	U1	4	MTT	228	Cassell
	U2	4	MTT	211	J. Johnson

Rhet. 144. NARRATIVE WRITING:- Practice in description, narrative sketches, stories. Prerequisite: Rhet. 101 and 102; sophomore standing.

3 hours	F1	1	MWF	226	Blum

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhet. 102.

3 hours	C1	10	MWF	205	Oleksy
	D1	11	MWF	205	Oleksy
	F1	1	MWF	205	Oleksy
	G1	2	MWF	205	Oleksy
	M1	9	M	227	Leonhard
			TT	212	
	R1	1	M	221	Leonhard
			TT	202	

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. R1	1	TT	218	Endleman
	Quiz C1	10	WF	25	Corley
	Quiz E1	12	WF	20	Corley
	Quiz H1	3	MW	96	Endleman
	Quiz L1	8	TT	20	Corley
	Quiz T1	3	TT	19	Endleman

[1] Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, social, and intellectual developments of the United States and to equip him for intelligent active participation in local and national affairs. Credit is not given for this course to a student with credit, or concurrent registration, in Pol. Sci. 150 or 151, or History 151 or 152.

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. B1	9	M	218	Bill
	Quiz G1	2	MWF	82	Pickens
	Quiz H1	3	MWF	82	Pickens
	Quiz P1	11	MTT	82	Bill

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situatic

4 hours[1]	Lec. F1	1	M	218	Colby
	Quiz N1	10	MTT	14	Colby
	Quiz R1	1	TTF	14	Colby
	Quiz T1	3	MTT	13	Cutshall

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. D1	11	WF	218	Klassen-Lipman Pickett
	Quiz B1	9	WF	96	Lipman
	Quiz C1	10	WF	96	Klassen

SOCIOLOGY

Sociol. 100. INTRODUCTION TO SOCIOLOGY:- Introductory analysis and description of the structure of dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social stratification, and institutions. Prerequisite: Sophomore standing.

3 hours	C1	10	MWF	97	Shanas
	F1	1	M	14	Klassen
			WF	28	
	M1	9	TTF	17	Corley
	P1	11	TT	25	Corley
		12	Th	25	Corley

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of persons and

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- (Concluded). relations to institutions, social order, and development. Prerequisite: Sociol. 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours	R1	1	TT	18	Corley
		1	F	19	Corley

Sociol. 140. SOCIAL CONTROL:- The methods and techniques of group social control of individuals in small groups, societies, and large publics. The innovations in methods of social control resulting from the development of the new mass media of communication. Prerequisite: Sociol. 100, or 104 and 105, or D.G.S. 151.

3 hours	D1	11	MWF	96	Shanas

ANTHROPOLOGY

Anthrop. 103. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology.

3 hours	P1	11	MTT	94	Endleman
	Q1	12	MTT	94	Endleman

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. No credit toward graduation is given for Spanish 101 without 102.

4 hours[1]	B1	9	TWTF	227	Marsh
	C1	10	TWTF	227	Marsh
	E1	12	TWTF	225	Tort
	H1	3	TWTF	227	

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Prerequisite: Spanish 101, or one year of high school Spanish.

4 hours[1]	A1	8	TWTF	227	Marsh

[1]Students with 95 or more credit hours receive only 3 hours credit.

Spanish 102. ELEMENTARY SPANISH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	TWTF	227	Tort
	H1	3	TWTF	225	Tort

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

4 hours	C1	10	TWTF	225	Sanchez
	F1	1	TWTF	225	Tort

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	E1	12	TWTF	227	Marsh
	J1	4	TWTF	227	

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Prerequisite: Spanish 102, or two years of high school Spanish. May be taken concurrently with Spanish 103.

2 hours	P1	11	TT	225	Sanchez

Spanish 202. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

No credit					
Feb. 21 - April 10	E1	12	WF	202	Hoskins
April 12 - May 29	E2	12	WF	202	Hoskins
Feb. 21 - April 10	G1	2	WF	201	Hoskins
April 12 - May 29	G2	2	WF	201	Hoskins

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery.

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- (Concluded).
Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	217	Evans
	B1	9	MWF	217	Evans
[1]Students with 95 or more credit hours receive only 2 hours credit.	C1	10	MWF	217	Wright
	C2	10	MWF	219	Hoskins
	D1	11	M	220	Goulson
			WF	217	
	D2	11	MWF	219	Hovde
	E1	12	M	220	Hovde
			WF	219	
	F1	1	M	220	Goulson
			WF	219	
	G1	2	MWF	219	Pitt
	G2	2	MWF	215	Hovde
	H1	3	MWF	219	Crews
	H2	3	M	220	Hovde
			WF	215	
	J1	4	MWF	219	Crews
	M1	9	MTT	219	Pitt
	N1	10	M	220	Pitt
			TT	217	
	P1	11	MTT	217	Thompson
	Q1	12	MTT	219	Crews
	R1	1	MTT	219	Crews
	T1	3	MTT	217	Thompson

Speech 105. VOICE AND ARTICULATION: - A drill course for the improvement of the normal speaking voice.

2 hours[1]	B1	9	M	220	Hoskins
			WF	219	
[1]Students with 95 or more credit hours receive only 1 hour credit.	C1	10	MWF	222	Rigler

Speech 107. PARLIAMENTARY PROCEDURE: - Principles and practice of parliamentary procedure.

2 hours[1]	Q1	12	TT	217	Thompson

[1]Students with 95 or more credit hours receive only 1 hour credit.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING: - Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING: - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours	M1	9	TT	217	Hovde

Speech 117. ARGUMENTATION: - Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	217	Pitt

Speech 141. ORAL INTERPRETATION OF LITERATURE: - Principles of interpretations, analysis, and oral reading of prose literature and verse.

2 hours[1]	N1	10	TT	219	Evans
	P1	11	TT	219	Pitt
[1]Students with 95 or more credit hours receive only 1 hour credit.	T1	3	TT	219	Crews

Speech 161. FUNDAMENTALS OF ACTING: - A study of the methods of acting with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Speech 141.

3 hours	G1	2	MWF	211	Goulson

Speech 164. RADIO SPEAKING: - Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. Prerequisite: Consent of the instructor.

2 hours	Q1	12-2	TT	451	Evans

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS): - Prerequisite: Registration in Math. 143.

2 hours	P1	11	TT	113	Wiesinger
	R1	1	TT	113	Futral
	U1	4	TT	113	Futral

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS): - Prerequisite: Registration in Math. 143.

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS): - (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	A1	8	TWTF	113	
	C1	10	MTWT	144	Cobb

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS): - Prerequisite: Registration in Math. 143.

5 hours	C1	10	MTWTF	113	
	E1	12	MTWTF	113	Wiesinger
	H1	3	MTWTF	113	

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS): - Prerequisite: Credit in Math. 123 or 127. For architecture students only.

3 hours	A1	8	MWF	134	Wiesinger

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS): Prerequisite: T. A. M. 150.

3 hours	B1	9	MWF	113	Cobb
	G1	2	MWF	113	Futral

T. A. M. 221. RESISTANCE OF MATERIALS: - Prerequisite: T. A. M. 150, 154 or 156.

3 hours	D1	11	MWF	113	Futral
	F1	1	MWF	113	Cobb

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY: - Prerequisite: Credit or registration in T. A. M. 221.

1 hour	Lab. A	8-10	Tu	61	Cobb
	Lab. B	10-12	F	61	Cobb
	Lab. C	3-5	Tu	61	Coe
	Lab. D	3-5	Th	61	Coe

IDEN. NUMBER_____

Date_____

Name in full_____ College_____

[Print] [Last name first; then given names]

Curriculum_____

Address_____

(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____ Examiner and Recorder's Stamp Here

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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1956/57

AGRICULTURE
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TIME TABLE

FIRST SEMESTER, 1956 - 1957

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Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-Registration Advisement Schedule....3
Calendar, First Semester, 1956....4
First Semester, Registration Schedule....5
Legend for Section Letters....5
Physical Examination Schedule for Former Students....6
Schedule of Tuition and Fees....7
Chicago Undergraduate Division Calendar, 1956-57....8
Urbana Calendar....9
Accountancy....10
Anthropology....57
Architecture....11,12
Art....12,13
Biological Sciences....13-15
Business Law....15
Chemistry....16-20
Civil Engineering....20,21
Economics....21,22
Education....23
Electrical Engineering....23
English....23-25
French....25,26
General Engineering....26,27
Geography....27,28
Geology....29
German....29-31
History....31,32
Humanities....32
Hygiene....33,34
Management....34
Marketing....34
Mathematics....34-38
Mechanical Engineering....38
Military Sciences and Tactics....39
Philosophy....40
Physical Education for Men....40-44
Physical Education for Women....45,46
Physical Sciences....46,47
Physics....47-49
Political Science....49,50
Psychology....50,51
Rhetoric....51-55
Social Sciences....55,56
Sociology....57
Spanish....57,58
Speech....58-60
Theoretical and Applied Mechanics....60,61

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PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester, 1956-57

FORMER STUDENTS ONLY

PLACE:
Liberal Arts and Sciences.....Room 29
Commerce.....Room 27
Engineering.....Room 184

A - E	Monday	September 10	1 - 4 p.m.
F - K	Tuesday	September 11	9 -12 noon
L - Q	Tuesday	September 11	1 - 4 p.m.
R - Z	Wednesday	September 12	9 -12 noon

Physical Education

No pre-advisement is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

First Semester, Fall, 1956

Tues., Sept. 4 - Wed., Sept. 12	Orientation Period.
Thurs., Sept. 12 - Fri., Sept. 14	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, September 14 for registration.)
Mon., Sept. 17	Instruction Begins.
Thurs., Sept. 20, 1:00 p.m.	Earliest time at which program changes may be made.
Fri., Sept. 28, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Nov. 2, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 9, 12:00 nnon	Mid-semester grades are due.
Fri., Nov. 9, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Wed., Nov. 21, 6:00 p.m.	Thanksgiving vacation begins.
Mon., Nov. 26, 8:00 a.m.	Thanksgiving vacation ends.
Mon., Dec. 3	Illinois Day (State admitted to Union, 1818).
Wed., Dec. 5, 4:00 p.m.	Students withdrawing on or after this date must petition for readmission.
Fri., Dec. 7, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of full credit for military withdrawals.
Fri., Dec. 14, 6:00 p.m.	Christmas vacation begins.
Wed., Jan. 2, 8:00 a.m.	Christmas vacation ends.
Fri., Jan. 18 - Sat., Jan. 26	Semester Examinations.
Mon., Jan. 28, 10:00 a.m.	General Educational Development Tests, College-Level, Room 300 (For all veterans who entered the Fall Semester 1956 as beginning freshman.)

FIRST SEMESTER REGISTRATION SCHEDULE

Your study-list will be given to you in the Navy Pier Gymnasium according to the schedule below.

FORMER STUDENTS

Former students paying their tuition and fees after 6 p.m., Friday, September 14, 1956, will be assessed a late registration fee of $5.00.

Thursday, September 13.

A	-	C	1:30 p.m.
D	-	H	10:30 a.m.
I	-	N	9:30 a.m.
O	-	R	8:30 a.m.
S	-	Z	11:30 a.m.

NEW STUDENTS

A	-	B	Friday, September 14	8:30 a.m.
C	-	D	Thursday, September 13	2:30 p.m.
E	-	G	Friday, September 14	9:30 a.m.
H	-	K	Thursday, September 13	3:30 p.m.
L	-	Mil	Friday, September 14	2:30 p.m.
Mim	-	P	Friday, September 14	1:30 p.m.
Q	-	So	Friday, September 14	11:30 a.m.
Sp	-	Z	Friday, September 14	10:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m. Friday, September 14, 1956.

LEGEND FOR SECTION LETTERS*

5, 4, and 3 hour

Hour	courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

PHYSICAL EXAMINATION SCHEDULE FOR FORMER STUDENTS

The University has always been interested in the student's physical welfare as well as in his academic advancement. In view of this and in accordance with the instructions of the University Administration, the annual physical examination of former students will be accomplished prior to registration this fall. Registration will not be permitted without a signed card indicating that you have completed your annual physical examination.

Please report to the Health Service at the time designated in the following schedule.

Tuesday, September 11, 1956

A - Bez.....10:00 a.m.
Bf - Casr.....11:00 a.m.
Cass - Dh.....1:00 p.m.
Di - Fq.....2:00 p.m.
Fr - Hap.....3:00 p.m.
Haq - Joh.....4:00 p.m.

Wednesday, September 12, 1956

Joi - Les.....8:00 a.m.
Let - Merq.....9:00 a.m.
Merr - Oq.....10:00 a.m.
Or - Rici.....11:00 a.m.
Ricj - Smh.....1:00 p.m.
Smi - Vand.....2:00 p.m.
Vane - Z.....3:00 p.m.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more..... $ 65.00
(Eight hours or less pay tuition of $5 a semester hour).

Non-residents of Illinois taking nine hours or more..... $175.00
(Eight hours or less pay tuition at rate of $12 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours..... $ 7.00
(Less than 5 hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours..... $ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours..... $ 6.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the second semester 1955-56 or the summer session 1956 must pay a General Deposit of..... $ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who pays his tuition and fees after 6:00 p.m., Friday, September 14, in the amount of..... $ 5.00

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1956 - 1957

First Semester (Fall, 1956)

Wed., Sept. 5 - Wed., Sept. 12	Orientation Period
Wed., Sept. 12 - Fri., Sept. 14	Registration
Mon., Sept. 17	Instruction Begins
Wed., Nov. 21, 6 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 26, 8 a.m.	Thanksgiving Vacation Ends
Mon., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Fri., Dec. 14, 6 p.m.	Christmas Vacation Begins
Wed., Jan. 2, 8 a.m.	Christmas Vacation Ends
Fri., Jan. 18 - Sat., Jan. 26	Semester Examinations

Second Semester (Spring, 1957)

Sat., Feb. 2 - Wed., Feb. 6	Orientation Period
Wed., Feb. 6 - Fri., Feb. 8	Registration
Mon., Feb. 11	Instruction Begins
Sat., Mar. 2	University Day (University opened 1868)
Thurs., Apr. 18, 6 p.m.	Easter Vacation Begins
Wed., Apr. 24, 8 a.m.	Easter Vacation Ends
Fri., May 10	Honors Day
Thurs., May 30	Memorial Day (Holiday)
Fri., May 31 - Sat., June 8	Semester Examinations

Summer Session - 1957

Fri., June 21	Registration
Mon., June 24	Instruction Begins
Thurs., July 4	Independence Day (Holiday)
Fri., Aug. 16 - Sat., Aug. 17	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1956 - 1957

First Semester (Fall, 1956)

Tues., Sept. 4 - Fri., Sept. 7	Entrance Examinations
Mon., Sept. 10 - Sat., Sept. 15	Freshmen Week and Registration
Mon., Sept. 17	Instruction Begins
Wed., Nov. 21, 1 p.m.	Thanksgiving Vacation Begins
Mon., Nov. 26, 1 p.m.	Thanksgiving Vacation Ends
Mon., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Fri., Dec. 21, 1 p.m.	Christmas Vacation Begins
Thurs., Jan. 3, 1 p.m.	Christmas Vacation Ends
Thurs., Jan. 17	Study Day (Classes dismissed at noon)
Fri., Jan. 18 - Sat., Jan. 26	Semester Examinations

Second Semester (Spring, 1957)

Tues., Jan. 29 - Fri., Feb. 1	Entrance Examinations
Mon., Feb. 4 - Wed., Feb. 6	Registration
Thurs., Feb. 7	Instruction Begins
Sat., Mar. 2	University Day (University opened, 1868)
Tues., Apr. 16, 1 p.m.	Easter Vacation Begins
Mon., Apr. 22, 1 p.m.	Easter Vacation Ends
Fri., May 3	Honors Day (Classes dismissed at noon)
Thurs., May 30	Memorial Day (Holiday)
Wed., May 29 - Fri., June 7	Semester Examinations
Sat., June 15	Commencement Exercises

Summer Session - 1957

Tues., June 4 - Fri., June 7	Entrance Examinations
Mon., June 17	Registration
Tues., June 18	Instruction Begins
Thurs., July 4	Independence Day (Holiday)
Fri., Aug. 9 - Sat., Aug. 10	Summer Session Examinations

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	16	Gray
	C1	10	MWF	16	Gray
	D1	11	MWF	22	Schneider
[1]Students with 95 or more credit hours receive only 2 hours credit.	E1	12	MWF	24	Fox
	F1	1	MWF	21	Graff
	F2	1	MWF	22	Kabbes
	G1	2	MWF	21	Schneider
	G2	2	MWF	20	Malinosky
	H1	3	MWF	18	Gray
	H2	3	MWF	22	Graff
	J1	4	MWF	22	Schneider
	M1	9	MTT	23	Kabbes
	M2	9	MTT	25	Ross
	N1	10	MTT	23	Kabbes
	P1	11	MTT	16	Stanton
	Q1	12	MTT	16	Stanton
	T1	3	MTT	24	Fox
	T2	3	MTT	19	Ross
	U1	4	MTT	24	Fox

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101. Prerequisite: Accy. 101.

3 hours[1]	C1	10	MWF	20	Malinosky
	D1	11	MWF	20	Malinosky
	F1	1	MWF	20	Malinosky
[1]Students with 95 or more credit hours receive only 2 hours credit.	T1	3	MTT	16	Stanton
	U1	4	MTT	16	Stanton

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	B1	9	MWF	22	Graff
	D1	11	MWF	21	Graff
	F1	1	MWF	23	Gray
	N1	10	MTT	25	Ross
	Q1	12	MTT	17	Ross

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	C1	10	MWF	22	Schneider
	E1	12	MWF	22	Kabbes

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	4	W	251	
	Lab. A	10-12	MTTF	241	
	Lab. B	8-10	MTTF	241	
	Lab. C	12-2	MTTF	241	
	Lab. D	3-5	MTTF	241	
	Lab. E	8-10	MTTF	242	

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. D	11	MF	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G.E. 108.

3 hours	Lec.	12	W	251
	Lab. A	8-10	MTTF	241
	Lab. B	10-12	MTTF	241
	Lab. D	3-5	MTTF	241
	Lab. E	10-12	MTTF	242
	Lab. F	3-5	MTTF	242

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of the fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

3 hours	Lec.	1	W	251
	Lab. A	1-4	MF	242
		2-4	W	242

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	8-11	MWF	242
	Lab. B	8-11	TWT	242

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces,

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- (Concluded) or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lec. E	12	MF	251	

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lec. C	10	MF	251

ART

Art 111. SURVEY OF ART HISTORY:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	Lec. G1	2	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Lec. B1	9	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in architecture.

2 hours	Lab. A	8-10	MWF	83
	Lab. B	10-12	MWF	83
	Lab. C	12-2	MWF	83
	Lab. D	2-4	MWF	83
	Lab. E	8-10	MWF	84
	Lab. F	10-12	MWF	84
	Lab. G	12-2	MWF	84
	Lab. H	2-4	MWF	84

Art 182. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 181.

2 hours	Lab. A	8-11	TT	83
	Lab. B	11-2	TT	83
	Lab. C	11-2	TT	84

Art 183. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art. 182.

2 hours	Lab. A	8-10	MWF	91
	Lab. B	10-12	MWF	91
	Lab. C	2-4	MWF	91
	Lab. D	8-11	TT	84
	Lab. E	8-11	TT	91

Art 184. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 183.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lab. A	3-6	TT	83	

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures and laboratory. Credit will not be given for both Biology 101 and D.G.S., 131. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

4 hours[1]

[1]Students with 95 or more credit hours receive only 3 hours credit.

Lec. P1	11	TT	218	Pickett
Lab. 1	8-10	M	46	Presley
		F	48	Presley
Lab. 2	10-12	M	46	Presley
		F	48	Presley
Lab. 3	12-2	TT	48	Pickett
Lab. 4	2-4	WF	44	
Lab. 5	4-6	WF	44	
Lab. 6	3-5	TT	46	W. J. Dembski
Lab. 7	12-2	M	46	Presley
		F	48	

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Lec. H1	3	WF	210	Little
Lab. 8	8-10	TT	48	Presley
Lab. 9	10-12	TT	48	Madison
Lab. 10	12-2	TT	44	
Lab. 11	12-2	M	44	
		F	43	
Lab. 12	12-2	WF	46	Little
Lab. 13	3-5	TT	48	Little
Lab. 14	4-6	WF	46	Little

.....

Lec. R1	1	TT	218	Yokoyama
Lab. 15	8-10	WF	46	McQuate
Lab. 16	10-12	WF	46	McQuate
Lab. 17	8-10	MW	48	
Lab. 18	10-12	M	44	Yokoyama
		F	43	
Lab. 19	12-2	MW	48	Yokoyama
Lab. 20	3-5	TT	44	
Lab. 21	4-6	MW	48	Yokoyama

.....

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lec. B1	9	WF	210	Glassman
	Lab. 22	8-10	TT	46	Glassman
	Lab. 23	8-10	TT	44	
	Lab. 24	10-12	TT	46	McQuate
	Lab. 25	10-12	WF	44	
	Lab. 26	12-2	WF	44	
	Lab. 27	12-2	TT	46	W. J. Dembski
	Lab. 28	2-4	WF	46	

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:- Application of biological principles to the living world. Lectures and laboratory. Prerequisite: Biology 101. Credit will not be given for both Biological Sciences 102 and D. G. S. 132. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

4 hours[1]	Lec. Q1	12	TT	210	
	Lab. 1	8-10	MW	43	Madison-Rouffa
	Lab. 2	10-12	MW	43	Glassman
[1]Students with 95 or more credit hours receive only 3 hours credit.	Lab. 3	3-5	TT	43	McQuate
	Lab. 4	2-4	MW	43	W. J. Dembski
	.....				
	Lec. E1	12	WF	210	
	Lab. 5	4-6	MW	43	W. J. Dembski
	Lab. 6	10-12	TT	43	Presley
	Lab. 7	12-2	TT	43	A.B.Williams-Glassman

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures and laboratory. Prerequisite: Biology 101.

4 hours[1]	Lec. N1	10	TT	210	Rouffa
	Lab. 1	10-12	MW	48	Rouffa
	Lab. 2	2-4	MW	48	Rouffa

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellualr plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 101.

Biology 121. MICROBIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R1	1	TT	24	Madison
	Lab. 1	8-10	TT	43	Madison

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Prerequisite: Biology 101.

4 hours[1]	Lec. C1	10	WF	210	A. B. Williams
	Lab. 1	8-10	WF	44	A. B. Williams
	Lab. 2	10-12	TT	44	A. B. Williams

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their functions and evolution. Lectures and laboratory. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. G1	2	MWF	210	Shank
	Lab. 1	8-10	MWF	45	Spirakis
	Lab. 2	10-12	MWF	45	Spirakis
	Lab. 3	8-11	TT	45	Spirakis
	Lab. 4	12-2	MWF	45	Shank

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. D1	11	MWF	210	Sangster
	Lab. 1	11-2	TT	45	Sangster
	Lab. 2	2-4	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	D1	11	MWF	24	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or in Mathematics 111 or 112.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. C	10	WF	204	Schrage
	Lec. N	10	TT	204	Schrage
	Lab. 1	8-10	MWF	53	Johnson
[1]Students who have	Quiz 1	8	TT	80	Johnson
received entrance	Lab. 2	10-12	MWF	53	MacKay-Schrage
credit for high	Quiz 2	11	TT	80	MacKay
school chemistry	Lab. 3	12-2	MWF	53	Barker
are given only 3	Quiz 3	12	TT	76	Barker
hours credit for	Lab. 4	2-4	MWF	53	Cowin
Chem. 101. Students	Quiz 4	4	TT	80	Cowin
with 95 or more	Lab. 5	1-3	MWF	53	Schrage
credit hours receive	Quiz 5	4	TT	76	Schrage
only 3 hours credit.	Lab. 6	8-11	TT	53	Ingram
	Quiz 6	9	MW	75	Ingram
	Lab. 7	11-2	TT	53	Seabright
	Quiz 7	1	WF	76	Seabright
	Lab. 8	10-1	TT	53	Johnson
	Quiz 8	12	WF	76	Johnson

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

3 hours[1]	Lec. H	3	WF	204	
	Lab. 11	9-11	M	53	
	Quiz 11	9	WF	80	
[1]Students with 95	Lab. 12	10-12	M	53	Story
or more credit hours	Quiz 12	11	WF	76	Story
receive only 2 hours	Lab. 13	12-2	M	53	Johnson
credit.	Quiz 13	1	WF	80	Johnson
	Lab. 14	3-5	M	53	Potempa
	Quiz 14	4	TT	74	Potempa
NOT OPEN TO STUDENTS	Lab. 15	9-11	Tu	53	
IN THE COLLEGE OF	Quiz 15	10	WF	80	
ENGINEERING.	Lab. 16	12-2	Th	53	
	Quiz 16	12	MW	75	
FOR STUDENTS IN THE	Lec. P	11	TT	210	
COLLEGE OF ENGINEER-	Lab. 18	12-2	Tu	53	Egbert
ING.	Quiz 18	12	MW	74	Egbert
	Lab. 19	8-10	Th	50	

Chem. 102. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz 19	8	WF	76	
	Lab. 20	10-12	M	53	Seabright
	Quiz 20	10	WF	76	Seabright
	Lab. 21	10-12	F	50	
	Quiz 21	9	TT	76	
	Lab. 22	1-3	W	53	
	Quiz 22	1	TT	76	
	Lab. 23	3-5	M	53	
	Quiz 23	4	TT	75	

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics 111 or 112.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. D	11	WF	204	Bachrach
	Lec. P	11	TT	204	Bachrach
	Lab. 25	8-10	MW	50	Sackheim
	Quiz 25	8	TT	76	Sackheim
	Lab. 26	10-12	MW	50	
	Quiz 26	10	TT	76	
	Lab. 27	12-2	MW	60	Sackheim
	Quiz 27	12	TT	75	Sackheim
	Lab. 28	2-4	MW	50	Seabright
	Quiz 28	4	MW	74	Seabright
	Lab. 29	4-6	MW	50	
	Quiz 29	5	TT	75	
	Lab. 30	8-10	TT	50	MacKay
	Quiz 30	8	WF	75	MacKay
	Lab. 31	10-12	TT	50	Carbonaro
	Quiz 31	9	TT	75	Carbonaro
	Lab. 32	8-10	TT	50	Yasnoff
	Quiz 32	10	TT	80	Yasnoff
	Lab. 33	3-5	TT	50	
	Quiz 33	3	MW	76	
	Lab. 34	9-11	TT	50	Sackheim
	Quiz 34	11	WF	75	Sackheim
	Lab. 35	12-2	TT	50	
	Quiz 35	12	WF	80	
	Lab. 36	1-3	MW	50	Bachrach
	Quiz 36	3	MW	74	Bachrach
	Lab. 37	3-5	MW	50	
	Quiz 37	2	MW	76	
	Lab. 38	9-11	MW	50	Bachrach-Carbonaro
	Quiz 38	9	TT	74	Bachrach

[1]Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Chemistry 101, 102 or 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R	1	TT	210	Huitema
	Lab. 41	8-10	TT	50	Eisenhardt
	Quiz 41	8	WF	80	Eisenhardt
[1]Credit in Chem. 104	Lab. 42	10-12	TT	50	Perry
will not be granted	Quiz 42	10	WF	75	Perry
to students who have	Lab. 43	12-2	WF	50	Perry
received credit in	Quiz 43	12	TT	74	Perry
Chem. 105 or 106.	Lab. 44	2-4	MW	50	Perry
Students with 95	Quiz 44	3	TT	80	Perry
or more credit hours	Lab. 45	4-6	MW	50	Harris
receive only 3 hours	Quiz 45	5	TT	74	Harris
credit.	Lab. 46	3-5	TT	50	Harris
	Quiz 46	3	WF	80	Harris
	Lab. 47	11-1	TT	50	Harris
	Quiz 47	1	WF	75	Harris

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for chemistry 104 and 106. Prerequisite: Chemistry 101, 102 or 103.

5 hours[1]	Lec. T	3	TT	204	Hunt
	Lab. 51	8-10	MWF	53	Story
	Quiz 51	8	TT	75	Story
[1]Credit in Chem. 105	Lab. 52	10-12	MWF	53	Egbert
will not be granted	Quiz 52	11	TT	76	Egbert
to students who have	Lab. 53	2-4	MWF	53	Hunt-Egbert
received credit in	Quiz 53	1	TT	75	Hunt
Chem. 104 or 106 .	Lab. 54	9-12	TT	53	Hunt
Students with 95	Quiz 54	11	WF	74	Hunt
or more credit hours					
receive only 3 hours					
credit.					

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in curricula in chemistry, chemical engineering, and chemistry majors who are not premedical students. Prerequisite: Chemistry 101, 102 or 103.

5 hours[1]	Lec. T	3	TT	210	Mueller
	Lab. 61	9-12	TT	53	Mueller
	Quiz 61	9	MW	74	Mueller
[1] Credit in Chem. 106	Lab. 62	1-3	MWF	53	Mueller-Ingram
will not be granted	Quiz 62	3	MW	75	Mueller

to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For students in curricula of chemistry or chemical engineering.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. F	1	WF	204	Weldon
	Lab. 71	10-12	TT	53	Weldon
	Quiz 71	11	MWF	80	Weldon
	Lab. 72	3-5	TT	53	Weldon-Carbonaro
	Quiz 72	2	MWF	80	Weldon

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry, graduation from high school in the upper quarter of the high school class, and high placement score.

5 hours[1]	Lec. G	2	MWF	204	Huitema
	Lab. 66	8-11	Tu	50	Barker
	Quiz 66	10	WF	74	Barker
	Lab. 67	8-11	Th	50	Barker
	Quiz 67	8	WF	74	Barker
	Lab. 68	9-12	F	50	Huitema
	Quiz 68	10	TT	75	Huitema
	Lab. 69	3-6	W	50	Potempa
	Quiz 69	3	TT	76	Potempa

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106.

5 hours	Lec. M	9	TT	210	Mansfield
	Lab. 76	9-11	M		
		9-12	WF	53	Mansfield
	Quiz 76	11	TT	75	Mansfield
	Lab. 77	3-5	M		
		2-5	WF	53	Mansfield-Egbert
	Quiz 77	3	TT	75	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. For all students in home economics and premedical courses and all others who have not followed the sequence Chemistry 101, 102 or 103, 106, and 110. Prerequisite: Chemistry 104, 105, or 106.

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	9-12	MWF	54	Miller-Gottlieb
	Quiz 81	10	Th	74	Miller
	Lab. 82	1-4	MWF	54	Carbonaro
	Quiz 82	1	Tu	74	Carbonaro

Chem. 123. QUANTITATIVE ANALYSIS FOR ENGINEERS:- A course in quantitative analysis designed for the needs of engineers, especially ceramic and metallurgical. Prerequsite: Chemistry 104 or 105.

5 hours	Lec. R	1	TT	65	Gottlieb
	Lab. 85	12-2	MWF	54	Gottlieb
	Quiz 85	3	Th	74	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- Gravimetric and volumetric analysis, modern advanced theory and practice. For all students other than those specified for Chemistry 122 and 123. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. F	1	WF	210	Babler
	Lab. 86	8-11	MWF	54	Babler-Gottlieb
	Quiz 86	8	Th	74	Babler
	Lab. 87	3-6	MWF	54	Savoy
	Quiz 87	3	Tu	74	Savoy

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chemistry 105 or 110.

5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	
	Lab. 91	9-12	WF	52	Eisenhardt
	Quiz 91	10	M	74	Eisenhardt
	Lab. 92	8-11	TT	52	Crum
	Quiz 92	10	M	75	Crum
	Lab. 93	2-5	MW	52	Crum
	Quiz 93	2	F	76	Crum

CIVIL ENGINEERING

C. E. 105. SURVEYING:- Prerequisite: G. E. 101 and Math. 123.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lec. B	9	M	63	
	Lab. M	9-12	Tu	63	
	Lab. N	9-12	Th	63	

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	F1	1	MWF	63	

C. E. 235. PLAIN CONCRETE:- Prerequsite: Sophomore standing in engineering or architecture.

2 hours	Lab. A	9-11	WF	61	

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	18	Miller
	D1	11	MWF	17	Williams
	F1	1	MWF	16	Williams
	G1	2	MWF	18	Miller
	T1	3	MTT	20	Geldard
	U1	4	MTT	20	Geldard

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	B1	9	MWF	24	Gillett
	C1	10	MWF	18	Miller
	F1	1	MWF	18	Miller
	G1	2	MWF	23	Gillett
	G2	2	MWF	25	Grampp
	H1	3	MWF	25	Grampp
	J1	4	MWF	21	Wendt
	Q1	12	MTT	18	Wendt

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	B1	9	MWF	20	Williams
	D1	11	MWF	23	Shaw
	F1	1	MWF	25	Shaw
	G1	2	MWF	16	Williams

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

Econ. 108. ELEMENTS OF ECONOMICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	25	Dunne
	E1	12	MWF	19	Larson
	G1	2	MWF	24	Dunne
	G2	2	MWF	22	Wendt
	H1	3	MWF	17	Larson
	N1	10	MTT	17	Wendt

Econ. 136. AMERICAN ECONOMIC HISTORY:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. Open only to freshmen and sophomores.

3 hours	B1	9	MWF	17	Grampp
	C1	10	MWF	19	Morris
	D1	11	MWF	19	Morris
	D2	11	MWF	18	Geldard
	E1	12	MWF	25	Grampp
	F1	1	MWF	17	Knudson
	F2	1	MWF	19	Geldard
	G1	2	MTF	19	Jung
	H1	3	MWF	21	Morris
	J1	4	MWF	18	Jung
	M1	9	MTT	21	Knudson
	Q1	12	MTT	20	Knudson
	T1	3	MTT	23	Shaw
	U1	4	MTT	23	Shaw

Econ. 138. EUROPEAN ECONOMIC HISTORY:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transporation, and finance in the principal European nations. Open only to freshmen and sophomores.

3 hours	E1	12	MWF	21	Jung

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108. Sophomore standing. Commerce students are required to elect Econ. 170 and will not be allowed credit for Psych. 135 or Math. 161.

3 hours	B1	9	MW	33	Derrick
	Prac. I	9-11	F	33	Derrick
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

Credit	Section	Hours	Days	Room	Instructor
2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	R1	1	TT	28	Ricks
	T1	3	TT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 114. WIRING AND ILLUMINATION:- Prerequisite: Sophomore standing or consent of instructor. Open to architecture students only.

3 hours	E1	12	MWF	123

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Physics 107 and Math. 143.

4 hours	Quiz B1	9	MWF	123
	Lab. B	9-12	Tu	120
	Quiz G1	2	MWF	113
	Lab. G	3-6	Th	120

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

3 hours	A1	8	MWF	215	Heiserman
	C1	10	MWF	202	Schiller
	C2	10	MWF	203	Karanikas
	D1	11	MWF	215	F. Johnson
	H1	3	MWF	215	Kogan
	N1	10	MTT	214	Nicholas
	T1	3	MTT	214	J. Johnson

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	216	I. Miller
	D1	11	MWF	216	Love
	E1	12	MWF	216	Niederman
	H1	3	MWF	212	Mackin
	L1	8	MTT	216	Richey
	N1	10	MTT	216	S. Miller
	T1	3	MTT	216	Gallagher

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's PRIDE AND PREJUDICE, Dostoevski's CRIME AND PUNISHMENT, Hardy's RETURN OF THE NATIVE, Conrad's VICTORY, and Hemmingway's A FAREWELL TO ARMS. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

3 hours	A1	8	MWF	214	Freyer
	B1	9	MWF	209	Atwood
	C1	10	MWF	211	Kerwick
	E1	12	MWF	214	Hipple
	G1	2	MWF	215	Halperin
	J1	4	MWF	211	Cassell
	L1	8	MTT	211	Leonhard
	P1	11	MTT	214	Griest
	Q1	12	MTT	211	Runyan

Engl. 113. AMERICAN LITERATURE:- Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	A1	8	MWF	212	Wright
	Q1	12	MTT	212	Jordan

Engl. 114. AMERICAN LITERATURE:- Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	B1	9	MWF	212	Wright
	C1	10	MWF	212	Stronks

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, RASSELAS. Particularly recommended for students in

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- (Concluded). professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Credit	Section	Hours	Days	Room	Instructor
3 hours	F1	1	MWF	215	Blum

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, Fitz-Gerald's THE RUBAIYAT OFOMAR KHAYAAM, readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	B1	9	MWF	215	Greenwald

Engl. 123. CHIEF MODERN ENGLISH WRITERS:- Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit is not given for English 123 in addition to English 101, 102, and 103. This course, together with English 121 and 122, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	E1	12	MWF	215	Waller

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	C1	10	MWF	215	Vest

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

4 hours	A1	8	TWTF	224	Lenihan
	B1	9	TWTF	224	Lenihan
	C1	10	TWTF	224	Lenihan
	D1	11	TWTF	224	Skogen
	E1	12	TWTF	224	Skogen
	F1	1	TWTF	226	Patlogan
	H1	3	TWTF	228	Skogen
	J1	4	TWTF	226	Cowles

French 102. ELEMENTARY COURSE:- Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	TWTF	226	Cowles
	E1	12	TWTF	228	Lenihan
	H1	3	TWTF	226	Cowles

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102 or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	226	Cowles

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103 or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler
	F1	1	TWTF	224	Skogen

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104 or four years of high school French.

3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	A2	8-10	MWF	136
	A3	8-10	MWF	137
	A4	8-10	MWF	141
	B1	10-12	MWF	135
	B2	10-12	MWF	136
	B3	10-12	MWF	137
	C1	12-2	MWF	135
	C2	12-2	MWF	136
	C3	12-2	MWF	137
	D1	2-4	MWF	135
	D2	2-4	MWF	136
	D3	2-4	MWF	137
	E2	4-6	MWF	136
	E3	4-6	MWF	137

G. E. 101. ELEMENTS OF DRAWING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	E4	4-6	MWF	141	
	F1	8-11	TT	135	
	F3	8-11	TT	137	
	F4	8-11	TT	141	
	F5	8-11	TT	143	
	G1	11-2	TT	135	
	G2	11-2	TT	136	
	G3	11-2	TT	137	
	G4	11-2	TT	141	
	G5	11-2	TT	141	

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane geometry.

3 hours	A5	8-10	MWF	143	
	B4	10-12	MWF	141	
	B5	10-12	MWF	143	
	C4	12-2	MWF	141	
	C5	12-2	MWF	143	
	D5	2-4	MWF	143	
	E5	4-6	MWF	143	

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145	
	B6	10-12	MWF	145	
	C6	12-2	MWF	145	
	D6	2-4	MWF	145	
	F6	8-11	TT	145	
	G6	11-2	TT	145	

G. E. 108. ARCHITECTURAL PROJECTIONS:- Prerequisite: G. E. 107.

2 hours	C7	12-2	MWF	146	
	D7	2-4	MWF	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G. E.

2 hours	B7	10-12	MWF	146	

G. E. 112. GENERAL ENGINEERING TECHNOLOGY:- Prerequisite: G. E. 101 and G. E. 102.

2 hours	F2	8-11	TT	136	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 satisfy the general education requirement in physical science, in the College of Liberal Arts and Sciences. Lectures, discussions and quiz.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. E1	12	WF	218	Finney
	Quiz N1	10	M	14	Finney
		10	TT	13	Finney
[1]Students with 95	Quiz Q1	12	MTT	13	Finney
or more credit hours	Quiz R1	1	MTT	13	Finney
receive only 4 hours	Lec. N1	10	TT	218	Cutshall
credit.	Quiz A1	8	MWF	13	Rheumer
	Quiz B1	9	MWF	13	Rheumer
	Quiz C1	10	MWF	13	Cutshall
	Quiz D1	11	MWF	14	Cutshall
	Quiz F1	1	M	14	Rheumer
		1	WF	13	Rheumer

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geography 101 or consent of instructor.

3 hours[1]	N1	10	TTF	14	Colby
	Q1	12	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Open to all students except those having credit in Geography 106.

3 hours[1]	B1	9	MW	14	Finney
		9	F	21	Finney

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. Prerequisite: Geography 101, or consent of instructor.

3 hours	D1	11	MWF	13	Rheumer
	M1	8	Tu	13	Rheumer
		9	TT	13	Rheumer

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R	1	TT	204	Karpinski
	Lab. 1	2-4	F	42	Kurs
	Quiz 1	3	W	42	Kurs
	Lab. 2	9-11	Th	42	Karpinski
	Quiz 2	10	Tu	42	Karpinski
	Lab. 3	11-1	M	42	Krinsley
	Quiz 3	12	W	42	Krinsley
	Lab. 4	11-1	F	42	Krinsley
	Quiz 4	11	W	42	Krinsley
	Lab. 5	2-4	M	42	Kurs
	Quiz 5	2	W	42	Kurs
	Lab. 6	3-5	Tu	42	Kurs
	Quiz 6	3	Th	42	Kurs

[1]Students with 95 or more credit hours receive only 3 hours credit.

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 141.

4 hours[1]	Lec. N	10	TT	65	Krinsley
	Lab. 11	11-1	Tu	42	Krinsley
	Quiz 11	12	Th	42	Krinsley

[1]Students with 95 or more credit hours receive only 3 hours credit.

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite; One semester of college chemistry.

4 hours	Lab-Discussion A	8-10	MWF	42-53	Kurs

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	Quiz-Discussion C	10	MWF	42	Karpinski
	Quiz-Discussion F	1	MWF	42	Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours	A1	8	TWTF	220	Hartoch
	B1	9	TWTF	220	Hartoch
	C1	10	TWTF	220	Willner
	C2	10	TWTF	221	Vardaman
	D1	11	TWTF	220	Braunfeld
	D2	11	TWTF	221	Teichmann
	E1	12	TWTF	220	Willner
	E2	12	TWTF	221	Teichmann
	F1	1	TWTF	220	Braunfeld
	F2	1	TWTF	223	Kauf
	H1	3	TWTF	220	Macdonald
	H2	3	TWTF	221	Kauf
	J1	4	TWTF	220	Macdonald

German 102. ELEMENTARY COURSE:- Continuation of German 101. Oral practice, reading, and grammar. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

4 hours	C1	10	TWTF	223	Braunfeld
	E1	12	TWTF	225	Macdonald
	F1	1	TWTF	221	Macdonald

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

4 hours	A1	8	TWTF	222	Willner
	B1	9	TWTF	222	Braunfeld
	C1	10	TWTF	222	Hartoch
	D1	11	TWTF	222	Kauf
	E1	12	TWTF	222	Hartoch
	F1	1	TWTF	222	Teichmann
	H1	3	TWTF	222	Teichmann

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	221	Willner
	E1	12	TWTF	223	Kauf

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

Credit	Section	Hours	Days	Room	Instructor
2 hours	G1	2	WF	223	Vardaman

HISTORY

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION:- Europe from the age of the great discoveries to the close of the Napoleonic wars.

4 hours[1]	Lec. F1	1	WF	218	Nicholson
	Quiz C1	10	WF	94	Nicholson
	Quiz D1	11	WF	94	Nicholson
[1]Students with 95	Quiz H1	3	MW	94	Goodman
or more credit hours	Quiz P1	11	TT	94	Goodman
receive only 3 hours	Quiz N1	10	TT	94	Nicholson
credit.	Quiz T1	3	TT	94	Goodman
	.....				
	Lec. M1	9	TT	218	Unfer
	Quiz A1	8	WF	82	Unfer
	Quiz B1	9	MW	94	Goodman
	Quiz C2	10	WF	82	Unfer
	Quiz E1	12	MW	94	
	Quiz F1	1	WF	94	Unfer
	Quiz Q1	12	TT	28	Unfer

Hist. 131. HISTORY OF ENGLAND TO 1688:- A survey of the political and constitutional, social and economic, diplomatic and imperial history of the British people from the beginning of English history through the revolution of 1688. This course, plus History 132, satisfies the general education requirement in the humanities in the College of Liberal Arts and Sciences.

4 hours[1]	F1	1	MTWT	97	Goodman
	B1	9	TWTF	97	Bill
	D1	11	TWTF	97	Bill

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundations, the movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	Riddle

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz G1	2	MW	97	Jones
	Quiz N1	10	TT	97	Riddle
	Quiz Q1	12	TT	97	Jones

Hist. 152. HISTORY OF THE UNITED STATES, 1865-1956:- A century of national life and organization. Prerequisite: Sophomore standing. In the first semester this course is open only to students in a teacher education curriculum.

3 hours	R1	1	MTT	94	Jones

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

3 hours	M1	9	TTF	94	Nicholson

HUMANITIES

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities.

4 hours	B1	9	TWTF	211	Blum
	D1	11	TWTF	211	Blum
	F1	1	TWTF	211	Kogan

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course, plus Humanities 152, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	D1	11	TWTF	223	Vardaman
	F1	1	TWTF	227	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Staff: Drs. Erskine, Reid, Kostka, Schuckmell, Halpin, Wallk, Limosani, Kruze, Lindsay, Lyon, Mabalingan, and Bucheleres.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	(For Women)				
	N	10	TT	213	Staff
	P	11	TT	213	Staff
	C	10	WF	213	Staff
	(For Men)				
	A	8	MW	213	Staff
	B	9	MW	213	Staff
	F	1	MW	213	Staff
	G	2	MW	213	Staff
	H2	3	MW	218	Staff
	J2	4	MW	218	Staff
	L	8	TT	213	Staff
	L2	8	TT	251	Staff
	M	9	TT	213	Staff
	M2	9	TT	251	Staff
	N2	10	TT	251	Staff
	P2	11	TT	251	Staff
	Q	12	TT	213	Staff
	R	1	TT	213	Staff
	T	3	TT	213	Staff
	U	4	TT	213	Staff

[1]Students with 95 or more credit hours receive only 1 hour credit.

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	D	11	WF	213	Staff

[1]Students with 95 or more credit hours receive only 1 hour credit.

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	(For Men and Women)				
	H	3	MW	213	Staff
	J	4	MW	213	Staff

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours[1]	P	11	TT	18	Erskine

[1]Students with 95 or more credit hours receive only 1 hour credit.

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	C1	10	MWF	24	Gillett
	E1	12	MWF	23	Gillett
	F1	1	MWF	24	J. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	B1	9	MWF	19	Larson
	C1	10	MWF	21	Knudson
	G1	2	MWF	17	Larson

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- Continuation of Mathematics 101. Prerequisite: Mathematics 101.

3 hours	G1	2	MWF	102	Ragland

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	96	Lumley
	A2	8	MTWTF	100	Stelling
	A3	8	MTWTF	101	
	A4	8	MTWTF	102	Scholomiti
	B1	9	MWF	96	Iverson
	B2	9	MTWTF	100	Ockert
	B3	9	MTWTF	101	
	B4	9	MTWTF	102	Lumley
	B5	9	MTWTF	113	Nolan
	C1	10	MWF	96	Olsen
	C2	10	MTWTF	100	Iverson
	C3	10	MTWTF	101	Ockert
	C4	10	MTWTF	102	Stelling
	D1	11	MTWTF	102	Deniston
	D2	11	MTWTF	100	Ballard
	D3	11	MTWTF	101	Vedral
	D4	11	MTWTF	110	Olsen
	E1	12	MWF	96	Ziomek
	E2	12	MTWTF	101	Ondrak
	E3	12	MTWTF	102	Ragland
	F1	1	MWF	103	C. S. Mann
	F2	1	MTWTF	100	Murphy
	F3	1	MTWTF	101	Gordon
	F4	1	MTWTF	102	Feinstein
	G1	2	MWF	111	Alberti
	H1	3	MWF	103	Scholomiti
	H2	3	MTWTF	100	Wiley
	H3	3	MTWTF	101	Gordon
	H4	3	MTWTF	102	Ziomek
	J1	4	MTWTF	103	Hill
	J2	4	MTWTF	100	Esterhammer
	J3	4	MTWTF	101	Gordon
	J4	4	MTWTF	102	Ziomek
	P1	11	TT	96	C. S. Mann
			F	104	

[1]Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No Credit	C1	10	MWF	103	Nolan
	G1	2	MWF	103	C. S. Mann
	Q1	12	M	76	Berglund
			TT	96	

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	MTWT	104	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	103	Ockert
	B1	9	MWF	103	Stelling
	*B2	9	MWF	105	Vedral
	C1	10	MWF	123	
	D1	11	MWF	103	Ragland
	D2	11	MWF	123	Dinkines
	*D3	11	MWF	96	Nolan
	D4	11	MWF	144	Feinstein
	E1	12	MWF	110	Stelling
	F1	1	MWF	111	Lariviere
	*F2	1	MWF	105	Wiley
	G1	2	MWF	110	Berglund
	G2	2	MWF	106	Esterhammer
	G3	2	MWF	101	Ziomek
	H1	3	MWF	110	C. S. Mann
	*H2	3	MWF	105	Esterhammer
	J1	4	MWF	110	Pennisi
	M1	9	M	76	Curtis
			TT	96	
	M2	9	M	80	Feinstein
			TT	103	
	N1	10	M	76	Ragland
			TT	96	
	N2	10	M	80	C. S. Mann
			TT	103	
	Q1	12	M	80	Pennisi
			TT	110	
	R1	1	M	76	Nolan
			TT	104	
	T1	3	M	80	Dinkines
			TT	110	

[1] Students with 95 or more credit hours receive only 2 hours credit.

* For Commerce students only.

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

Math. 114. PLANE TRIGONOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	L1	8	TT	104	Ballard
	L2	8	TT	105	Ockert
	M1	9	TT	104	Iverson
[1]Students with 95 or more credit hours receive only 1 hour credit.	M2	9	TT	105	Vedral
	N1	10	TT	104	Deniston
	N2	10	TT	105	Nolan
	P1	11	TT	103	Murphy
	P2	11	TT	105	
	Q1	12	TT	104	Olsen
	Q2	12	TT	105	Murphy
	R1	1	TT	111	Lariviere
	R2	1	TT	105	Esterhammer
	R3	1	TT	103	Wiley
	T1	3	TT	104	Hill
	T2	3	TT	105	Esterhammer
	T3	3	TT	103	Scholomiti
	U1	4	TT	104	Alberti

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, 114.

5 hours[1]	A1	8	MTWTF	111	Vedral
	A2	8	MTWTF	110	Deniston
	B1	9	MTWTF	111	Olsen
[1]Students with 95 or more credit hours receive only 4 hours credit.	B2	9	MTWTF	110	Ballard
	C1	10	MTWTF	111	Curtis
	C2	10	MTWTF	110	Berglund
	D1	11	MTWTF	111	Ondrak
	E1	12	MTWTF	111	Frank
	E2	12	MTWTF	100	Wiley
	F1	1	MTWTF	110	Alberti
	H1	3	MTWTF	111	Lariviere
	J1	4	MTWTF	111	Lariviere

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122 or 123.

3 hours	A1	8	MWF	104	Ballard
	B1	9	MWF	104	Deniston
	C1	10	MWF	104	Hartley
	C2	10	MWF	105	Feinstein
	D1	11	MWF	105	Frank
	E1	12	MWF	104	Curtis
	F1	1	MWF	104	Berglund
	G1	2	MWF	104	Murphy
	G2	2	MWF	100	Dinkines
	H1	3	MWF	104	Hill

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Math. 133.

Credit	Section	Hours	Days	Room	Instructor
5 hours	A1	8	MTWTF	106	Iverson
	B1	9	MTWTF	106	Ondrak
	C1	10	MTWTF	106	Frank
	D1	11	MTWTF	106	Scholomiti
	E1	12	MTWTF	106	Dinkines
	E2	12	MTWTF	103	Hill
	F1	1	MTWTF	106	Pennisi
	H1	3	MTWTF	106	Alberti

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS:- Prerequisite: Math. 132 and 142, or 137 and 147.

3 hours	A1	8	MWF	105	Curtis
	E1	12	MWF	105	Murphy
	G1	2	MWF	105	Pennisi

MECHANICAL ENGINEERING

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in engineering or consent of instructor.

3 hours	B1	9	MWF	65
	H1	3	MWF	65

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing.

3 hours	Lec. C	10	MF	65
	Lec. F	1	MF	65
	Lab. A	8-11	Tu	71
	Lab. B	11-2	W	71
	Lab. C	2-5	W	71

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing.

3 hours	Lec. M	9	TT	65
	Lec. P	11	TT	65
	Lec. G	2	MF	65
	Lab. A	11-2	M	64
	Lab. B	11-2	W	64
	Lab. C	2-5	F	64

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Prerequisite: Physics 108 and Math. 143.

3 hours	H1	3	MW	144
		3-5	F	144

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- Organization of the Army and ROTC; Individual weapons and marksmanship; and School of the Soldier and Exercise of Command. Prerequisite: Approval of the Military Science Department.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	116	O'Neill
	Theory 2X	9	TT	116	McClenahan
	Theory 3X	10	MW	116	O'Neill
	Theory 4X	10	TT	116	McClenahan
	Theory 5X	11	MW	116	O'Neill
	Theory 6X	11	TT	116	McClenahan
	Theory 7X	1	MW	116	O'Neill
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- Map and aerial photograph reading; Crew-served weapons and gunnery; and School of the Soldier and Exercise of Command. Prerequisite: M. S. 101 and M. S. 102 or approval of the Military Science Department.

1 hour	Theory 1X	9	MW	230	de Roche
	Theory 2X	9	TT	230	de Roche
	Theory 3X	11	MW	230	de Roche
	Theory 4X	10	TT	230	de Roche
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 205. JUNIOR ADVANCED INFANTRY DRILL AND THEORY:- Leadership; Military teaching methods; Maps and aerial photographs; Crew served weapons and gunnery; Mine warfare; and School of the Soldier and Exercise of Command. Prerequisite: Mil. Sci. 103 and 104, successful completion of Armed Forces qualification test, officer-type physical examination, and approval of Military Science Department.

3 hours	Theory X	12	MTWT	230	McClenahan
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, arts, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	12	MWF	97	Page
	H1	3	MW	82	Page
			F	94	Page
	N1	9	Tu	22	Page
		10	TT	22	Page
	P1	11	M	97	C. Morris
			TT	22	C. Morris

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	B1	9	M	97	C. Morris
			WF	82	C. Morris
	C1	10	M	94	C. Morris
			WF	17	C. Morris
	G1	2	MWF	94	Page
	Q1	12	TTF	82	C. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

2 hours	P1	11	TT	24	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Fordham
	D	11	MWF	Gym	Kristufek
	E	12	MWF	Gym	W. C. Mann
	F	1	MWF	Gym	Kristufek

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hour	A	8	MWF	Gym	Bedard
	B	9	MWF	Gym	

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C	10	MWF	Gym	Frey
	D1	11	MWF	Gym	Kreidler
	D2	11	MWF	Gym	Versen
	E1	12	MWF	Gym	L. H. Miller
	E2	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Fordham
	G	2	MWF	Gym	Rader
	H	3	MWF	Gym	L. H. Miller

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period. First class will meet in the men's gym.

1 hour	Mn	*9	TT	Town Club	Kristufek

*Class will meet for 1½ hours.

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period. First class session will meet in the men's gym.

1 hour	Np	*10	TT	Town Club	Kristufek

*Class will meet for 1½ hours.

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	C	10	MWF	Gym	Bedard
	D	11	MWF	Gym	Frey
	E	12	MWF	Gym	Bedard
*Classes will meet for 1½ hours.	F	1	MWF	Gym	Frey
	G	2	MWF	Gym	Frey
	Pq	*11	TT	Gym	Bedard
	Qr	*12	TT	Gym	Montcalm

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	Np	*10	TT	Gym	Kreidler

*Class will meet for 1½ hours.

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Kreidler
	D	11	MWF	Gym	Montcalm

P. E. M. 114. APPARATUS STUNTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
*Classes will meet for 1½ hours.	E	12	MWF	Gym	Frey
	F	1	MWF	Gym	Montcalm
	H	3	MWF	Gym	Bedard
***Students will be released early to participate in extra-curricular activities.	Qr	*12	TT	Gym	Bedard
	Rs	***1	TT	Gym	Frey

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Strnad
	D	11	MWF	Gym	Berrafato
	E	12	MWF	Gym	Strnad
*Classes will meet for 1½ hours.	F	1	MWF	Gym	Berrafato
	G	2	MWF	Gym	Berrafato
	Qr	*12	TT	Gym	

P. E. M. 118. WRESTLING:-

1 hour	A	8	MWF	Gym	Strnad
	B	9	MWF	Gym	Strnad
	C	10	MWF	Gym	W. C. Mann
*Classes will meet for 1½ hours.	D	11	MWF	Gym	W. C. Mann
	E	12	MWF	Gym	Versen
	G	2	MWF	Gym	W. C. Mann
	H	3	MWF	Gym	W. C. Mann
***Students will be released early to participate in extra-curricular activities.	Lm	*8	TT	Gym	Strnad
	Qr	*12	TT	Gym	Kristufek
	Rs	***1	TT	Gym	Berrafato

P. E. M. 120. PERSONAL DEFENSE:-

1 hour	F	1	MWF	Gym	Kreidler
	Np	*10	TT	Gym	Strnad
	Pq	*11	TT	Gym	Kreidler

*Classes will meet for 1½ hours.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	B	9	MWF	Gym	Bedard
	C	10	MWF	Gym	Versen
	D	11	MWF	Gym	L. H. Miller
	E	12	MWF	Gym	Kreidler
	F	1	MWF	Gym	

P. E. M. 123. WEIGHT LIFTING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
*Classes will meet for 1½ hours.	G	2	MWF	Gym	L. H. Miller
	Lm	*8	TT	Gym	
	Mn	*9	TT	Gym	
	Pq	*11	TT	Gym	
	Qr	*12	TT	Gym	Versen

P. E. M. 129. VOLLEYBALL:-

1 hour	A	**8	MWF	Gym	
	B	**9	MWF	Gym	Fordham
	Lm	*8	TT	Gym	Kreidler
*Classes will meet for 1½ hours.	Mn	*9	TT	Gym	Strnad
	Np	*10	TT	Gym	Berrafato
	Pq	*11	TT	Gym	Berrafato
	Qr	*12	TT	Gym	Frey
**Adaptive students ONLY.	Rs	***1	TT	Gym	W. C. Mann

***Students will be released early to participate in extra-curricular activities.

P. E. M. 130. BEGINNING BASKETBALL:-

1 hour	F	1	MWF	Gym	Rader
	H	3	MWF	Gym	Rader

P. E. M. 132. ARCHERY:-

1 hour	Pq	*11	TT	Gym	Rader

*Class will meet for 1½ hours.

P. E. M. 136. BADMINTON:-

1 hour	Lm	*8	TT	Gym	Rader
	Mn	*9	TT	Gym	L. H. Miller
	Np	*10	TT	Gym	Versen
*Classes will meet for 1½ hours.	P2	*11	TT	Gym	Montcalm
	Qr	*12	TT	Gym	W. C. Mann
	Rs	***1	TT	Gym	Fordham

***Students will be released early to participate in extra-curricular activities.

P. E. M. 139. BACKYARD SPORTS:-

P. E. M. 139. - BACKYARD SPORTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	G	**2	MWF	Gym	Gedvilas
	H	**3	MWF	Gym	Berrafato
*Classes will meet	Mn	*9	TT	Gym	Rader
for 1½ hours.	Rs	***1	TT	Gym	Gedvilas

**Adaptive students ONLY. ***Students will be released early to participate in extra-curricular activities.

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

1 hour	Np	*10	TT	Gym	Rader
	Qr	*12	TT	Gym	Gedvilas

*Classes will meet for 1½ hours.

P. E. M. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in Physical Education.

2 hours	D	11	WF	65	Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in Physical Education. (Second eight weeks).

2 hours	A	8-10	MTWTF	Gym	Gedvilas

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in Physical Education. (First eight weeks).

2 hours	A	8-10	MTWTF	Gym	Versen

P. E. M. 153. FITNESS PROGRAMS:- For students majoring in Physical Education.

2 hours	A	8	MWF	Town	Montcalm
		9	TT	Club	

P. E. M. 154. SWIMMING:- For students majoring in Physical Education.

2 hours	B	9	MWF	Town	Kristufek
			TT	Club	

RECREATION 174. CAMP COUNSELING:- For students majoring in Physical Education.

3 hours	E	12	MWF	65	Gedvilas

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	D	11	MWF	Audit.	Staff
	E	12	MWF	Audit.	Staff
	*Mn	9	TT	Audit.	Staff
*Classes meet for 1½ hours.	*Np	10	TT	Audit.	Staff
	*Qr	12	TT	Audit.	Staff
	**Rs	1	TT	Audit.	Anzalone

**Students will be released early to participate in extra-curricular activities.

P. E. W. 102. MODIFIED ACTIVITIES:- (Open only to students assigned by Health Service).

1 hour	E	12	MWF	Audit.	Anzalone

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	B	9	MWF	Audit.	Staff
	C	10	MWF	Audit.	Staff
	D	11	MWF	Audit.	Staff
*Classes meet for 1½ hours.	*Mn	9	TT	Audit.	Staff
	*Np	10	TT	Audit.	Staff
	*Pq	11	TT	Audit.	Staff

P. E. W. 106. INTERMEDIATE RHYTHMS:- (Prerequisites: 105 or consent of instructor).

1 hour	**Rs	1	TT	Audit.	Staff

*Classes meet for 1½ hours.
**Students will be released early to participate in extra-curricular activities.

P. E. W. 123. BASKETBALL:-

1 hour	*Tu	3	TT	Audit.	Anzalone

*Classes will meet for 1½ hours.

P. E. W. 124. VOLLEYBALL:-

1 hour	F	1	MWF	Audit.	Anzalone
	G	2	MWF	Audit.	Anzalone

P. E. W. 130. BADMINTON:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	H	3	MWF	Audit.	Anzalone

P. E. W. 135. ARCHERY AND VARIED SPORTS:- Students must furnish own equipment.

1 hour	*Pq	11	TT	Audit.	Pesavento

*Classes meet for 1½ hours.

P. E. W. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish canoes, lifejackets etc.

1 hour	*Pq	11	TT	Audit.	Staff

*Classes meet for 1½ hours.

P. E. W. 143. AMERICAN SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Staff

P. E. W. 144. FOLK DANCING:-

1 hour	E	12	MWF	Audit.	Barton

P. E. W. 110. BEGINNING SWIMMING:- (Professional Course).

1 hour	*Pq	11	TT	Town Club	Anzalone

*Classes will meet for 1½ hours.

P. E. W. 150. ORIENTATION:- (Professional Course).

2 hours	D	11	M W	74 251	Pesavento

P. E. W. 151. BODY MECHANICS, GYMNASTICS & HOCKEY:- (Professional Course).

2 hours	C	10	MTWTF	Audit.	Pesavento

P. E. W. 153. SOCCER, SPEEDBALL & VOLLEYBALL:- (Professional Course).

1 hour	B	9	MTWTF	Audit.	Pesavento

PHYSICAL SCIENCES

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and D. G. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. M	9	TT	204	Meloy
	Lab. 1	9-12	M	85	Cowin
	Quiz 1	1	Th	74	Cowin
	Lab. 2	10-1	Tu	85	Miller
	Quiz 2	11	Th	74	Miller
	Lab. 3	9-12	W	85	Cowin
	Quiz 3	10	Tu	74	Cowin
	Lab. 4	2-5	W	85	Miller
	Quiz 4	2	M	74	Miller
	Lab. 5	9-12	F	85	Cowin
	Quiz 5	11	Tu	74	Cowin
	Lab. 6	1-4	F	85	Miller
	Quiz 6	1	W	74	Miller

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- A continuation of Phys. Sci. 101. Credit will not be given for both Phys. Sci. 101-102 and D. G. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. B	9	WF	204	Meloy
	Lab. 11	1-4	M	85	Meloy
	Quiz 11	2	F	74	Meloy

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Prerequisite: Trigonometry.

5 hours	Lec. X	11	Tu	127
	Lec. Y	1	Tu	127
	Quiz B1	9	MWF	134
	Lab. B	8-11	Th	122
	Quiz D1	11	MWF	134
	Lab. D	8-11	Tu	122
	Quiz F1	1	MWF	134
	Lab. F	3-6	Th	122

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz G1	2	MWF	134	
	Lab. G	11-2	Th	122	
	Quiz H1	3	MWF	134	
	Lab. H	3-6	Tu	122	

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. X	11	Th	127	
	Quiz C1	10	MWF	134	
	Lab. C	8-11	Tu	124	
	Quiz F1	1	MWF	123	
	Lab. F	3-6	Tu	124	

Physics 106. GENERAL PHYSICS (MECHANICS):- Prerequisite: Credit or registration in Math. 133.

4 hours	Lec. X	9	M	127	
	Lec. Y	11	M	127	
	Lec. Z	2	M	127	
	Quiz A1	8	WF	144	
	Lab. A	8-11	Tu	117	
	Quiz C1	10	WF	144	
	Lab. C	8-11	Th	117	
	Quiz E1	12	WF	144	
	Lab. E	3-6	Tu	117	
	Quiz F1	1	WF	144	
	Lab. F	11-2	Tu	117	
	Quiz G1	2	WF	123	
	Lab. G	11-2	Th	117	
	Quiz L1	8	TT	134	
	Lab. L	8-11	W	117	
	Quiz M1	9	TT	134	
	Lab. M	8-11	F	117	
	Quiz P1	11	TT	134	
	Lab. P	12-3	W	117	
	Quiz P2	11	TT	123	
	Lab. 2P	3-6	M	117	
	Quiz Q1	12	TT	144	
	Lab. Q	3-6	W	117	
	Quiz R1	1	TT	134	
	Lab. R	12-3	F	117	
	Quiz T1	3	TT	134	
	Lab. T	3-6	F	117	

Physics 107. GENERAL PHYSICS. (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- Prerequisite: Credit or registration in Math. 143. Physics 106.

Physics 107. GENERAL PHYSICS. (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	11	W	127	
	Lec. Y	2	W	127	
	Quiz G1	2	M	123	
		2	F	144	
	Lab. G	3-6	W	124	
	Quiz H1	3	MF	123	
	Lab. H	3-6	Th	124	
	Quiz L1	8	TT	123	
	Lab. L	8-11	F	124	
	Quiz M1	9	TT	134	
	Lab. M	12-3	W	124	
	Quiz N1	10	TT	134	
	Lab. N	8-11	W	124	
	Quiz Q1	12	TT	123	
	Lab. Q	3-6	M	124	

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- Prerequisite: Credit or registration in Math. 143. Physics 106.

4 hours	Lec. X	11	F	127	
	Lec. Y	1	F	127	
	Quiz M1	9	TT	144	
	Lab. M	8-11	M	122	
	Quiz N1	10	TT	123	
	Lab. N	8-11	W	122	
	Quiz P1	11	TT	113	
	Lab. P	12-3	M	122	
	Quiz R1	1	TT	123	
	Lab. R	3-6	M	122	
	Quiz T1	3	TT	123	
	Lab. T	3-6	W	122	

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus. Registration in Math. 345 or consent of instructor.

4 hours	Quiz G1	2	MWF	207	
	Lab. G	3-6	Th	207	

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	E1	12	MWF	28	Gabis

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- A survey course covering such topics as the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems and organizations involved in maintaining peace.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	28	Israel

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development of national and state governments; the federal system; national and state constitutions; civil and political rights; party systems; nature, structure, powers, and procedure of legislative and executive departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	28	Israel
	C1	10	MWF	28	Gabis
	F1	1	MWF	28	Gabis
	G1	2	MWF	28	Gabis
	Q1	12	TTF	94	Israel
	T1	3	TTF	82	Israel

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; police power; regulation of interstate commerce; promotion of social and economic welfare; current problems. Prerequisite: Pol. Sci. 150, or consent of department. Students may not receive credit for both Pol. Sci. 151 and 101 and 102.

3 hours	R1	1	TT	82	Israel
		1	F	97	Israel

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

4 hours	Lec. B1	9	WF	218	Howard
	Quiz C1	10	WF	25	Howard
	Quiz E1	12	WF	20	Howard
	Quiz M1	9	TT	16	Howard
	Quiz N1	10	TT	16	Howard
	Quiz Q1	12	TT	24	Howard

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lec. Q1	12	TT	218	Lipman
	Quiz D1	11	WF	16	Fredian
	Quiz G1	2	WF	14	Fredian
	Quiz H1	3	WF	14	Fredian
	Quiz Q2	12	TT	23	Fredian
	Quiz T1	3	TT	25	Fredian

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology, including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psych. 220 at the Urbana campus for credit. Prerequisite: Psych. 100, or its equivalent, or junior standing.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. C1	10	WF	218	Lipman
	Quiz M1	9	TT	17	Fredian
	Quiz N1	10	TT	24	Lipman
	Quiz P1	11	TT	23	Fredian

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination.

Credit	Section	Hours	Days	Room	Instructor
No credit	A1	8	MWF	223	Kenny
	B1	9	MWF	223	Kenny
	B2	9	M	225	
			WF	214	Schiller
	C1	10	MWF	226	Kenny
	C2	10	M	225	
			WF	216	F. Johnson
	D1	11	M	227	
			WF	202	Hegie
	*D2	11	MTWTF	201	Kirstein-Hoskins
	E1	12	M	221	
			WF	202	Kenny
	*E2	12	MTWTF	201	Kirstein-Hoskins
	F1	1	M	224	
			WF	202	Schiller
	F2	1	MWF	214	F. Johnson

*Admission by consent of Division of Humanities.

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	G1	2	MWF	96	Hegie
	G2	2	MWF	206	Crawley
	G3	2	MWF	211	Timmis
	G4	2	MWF	209	Stronks
	H1	3	M	222	
			WF	209	Timmis
	H2	3	M	221	
			WF	214	Star
	H3	3	MWF	206	Crawley
	H4	3	M	225	
			WF	211	
	J1	4	MWF	229	Halperin
	J2	4	MWF	215	Star
	L1	8	MTT	206	S. Miller
	M1	9	MTT	205	Jackman
	N1	10	M	228	
			TT	229	S. Miller
	N2	10	MTT	205	Jackman
	P1	11	M	223	
			TT	215	Leonhard
	P2	11	MTT	202	Carlson
	Q1	12	MTT	206	Cox
	Q2	12	MTT	202	Carlson
	R1	1	MTT	203	Cox
	T1	3	MTT	201	Cox
	U1	4	M	225	Carlson
			TT	96	

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

3 hours	A1	8	MWF	228	I. Miller
	A2	8	MWF	201	Atwood
	A3	8	MWF	229	
	A4	8	MWF	203	Hipple
	A5	8	MWF	221	Stronks
	B1	9	MWF	202	Heiserman
	B2	9	MWF	201	Freyer
	B3	9	M	227	
			WF	229	
	B4	9	MWF	226	Karanikas
	C1	10	M	222	
			WF	205	McNamara
	C2	10	M	227	
			WF	206	Greenwald

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	M	221	
			WF	219	Niederman
	D2	11	M	224	
			WF	214	Star
	D3	11	MWF	229	Halperin
	D4	11	M	228	
			WF	212	I. Miller
	E1	12	M	224	
			WF	209	Stronks
	E2	12	M	227	
			WF	229	Mackin
	E2	12	M	226	
			WF	211	
	F1	1	MWF	96	McNamara
	F2	1	MWF	205	Heiserman
	F3	1	MWF	212	Greenwald
	F4	1	MWF	201	Freyer
	F5	1	MWF	206	Crawley
	F6	1	M	211	
			WF	209	I. Miller
	G1	2	MWF	221	Niederman
	G2	2	MWF	220	Kerwick
	G3	2	MWF	212	Greenwald
	G4	2	MWF	201	Hipple
	G5	2	MWF	222	Star
	G6	2	MWF	228	
	G7	2	MWF	203	Cassell
	G8	2	MWF	224	
	G9	2	MWF	202	Heiserman
	G10	2	MWF	229	Waller
	H1	3	MWF	229	Halperin
	H2	3	MWF	223	Kerwick
	H3	3	MWF	96	Hegie
	H4	3	M	227	
			WF	201	
	H5	3	M	220	
			WF	217	Niederman
	H6	3	M	226	
			WF	216	Schiller
	J1	4	MWF	214	Rudin
	J2	4	MWF	201	Kogan
	J3	4	MWF	96	Hegie
	J4	4	MWF	216	
	J5	4	MWF	227	Waller
	L1	8	MTT	219	Runyan
	M1	9	M	221	
			TT	226	Cox

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	M2	9	MTT	229	Jordan
	M3	9	M	211	
			TT	212	Nicholas
	N1	10	M	224	
			TT	211	Gallagher
	N2	10	M	221	
			TT	203	J. Johnson
	P1	11	MTT	212	Gallagher
	P2	11	M	220	
			TT	203	Kogan
	P3	11	M	211	
			TT	205	Runyan
	Q1	12	M	220	
			TT	215	Nicholas
	Q2	12	M	228	
			TT	214	S. Miller
	Q3	12	MTT	229	J. Johnson
	R1	1	M	227	
			TT	228	J. Johnson
	R2	1	MTT	209	Gallagher
	R3	1	MTT	202	Griest
	R4	1	M	220	
			TT	201	Runyan
	T1	3	MTT	209	Jordan
	T2	3	MTT	211	Griest
	U1	4	MTT	203	Griest

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

3 hours	A1	8	MWF	226	Karanikas
	A2	8	MWF	225	McNamara
	B1	9	M	222	
			WF	205	Vest
	B2	9	MWF	203	Hipple
	B3	9	M	224	
			WF	217	McNamara
	C1	10	MWF	229	Atwood
	C2	10	MWF	201	Crawley
	D1	11	M	226	
			WF	206	Timmis
	D2	11	MWF	203	Freyer
	E1	12	M	225	
			WF	206	Wright
	E2	12	MWF	203	Cassell

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	M	225	
			WF	216	Love
	F2	1	MWF	229	Atwood
	G1	2	MWF	226	Karanikas
	G2	2	MWF	214	Love
	G3	2	MWF	216	Mackin
	H1	3	MWF	224	Love
	H2	3	MWF	202	Waller
	H3	3	MWF	203	Cassell
	J1	4	MWF	205	Mackin
	J2	4	MWF	202	Timmis
	L1	8	MTT	209	Nicholas
	M1	9	M	220	
			TT	216	Richey
	N1	10	M	220	
			TT	202	Kirstein
	P1	11	M	222	
			TT	216	Richey
	Q1	12	M	223	
			TT	216	Richey
	R1	1	M	226	
			TT	96	Jordan
	T1	3	M	228	
			TT	96	Carlson

Rhet. 133. EXPOSITORY WRITING:- Prerequisite: Rhetoric 101 and 102, sophomore standing.

3 hours	G1	2	MWF	225	Rudin

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

3 hours	C1	10	M	223	
			WF	214	Blum
	D1	11	MWF	205	Oleksy
	E1	12	MWF	205	Oleksy
	F1	1	M	223	
			WF	203	Kerwick
	G1	2	MWF	205	Oleksy
	H1	3	MWF	205	Oleksy
	M1	9	MTT	214	Leonhard
	Q1	12	M	222	
			TT	203	Leonhard

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. G1	2	MW	218	Endleman
	Quiz C1	10	WF	23	Corley
	Quiz H1	3	MW	97	Endleman
[1]Students with 95	Quiz L1	8	TT	25	Corley
or more credit hours	Quiz M1	9	TT	24	Corley
receive only 3 hours	Quiz T1	3	TT	97	Endleman
credit.					

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registration, in Pol. Sci. 150 or 151, or Hist. 151 or 152.

4 hours[1]	Lec. D1	11	M	218	Bill
	Quiz G1	2	MWF	82	Bill
	Quiz M1	9	MTT	82	Jones
[1]Students with 95	Quiz N1	10	MTT	82	Jones
or more credit hours	Quiz P1	11	MTT	82	Riddle
receive only 3 hours					
credit.					

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103.

4 hours[1]	Lec. B1	9	M	218	Colby
	Quiz G1	2	MWF	13	Cutshall
	Quiz M1	9	TTF	14	Colby
	Quiz R1	1	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. D1	11	WF	218	Klassen-Lipman-Pick
	Quiz B1	9	WF	25	Klassen
	Quiz P1	11	TT	21	Lipman

SOCIOLOGY

Sociol. 100. PRINCIPLES OF SOCIOLOGY:- Concerned with the scientific study of human societies. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	25	Corley
	C1	10	MWF	97	
	E1	12	MWF	82	Klassen
			F	18	Klassen
	P1	11	TT	25	Corley
		12	Th	25	Corley

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

3 hours	B1	9	MWF	28	Corley

Sociol. 140. SOCIAL CONTROL:- The methods and techniques of group social control of individuals in small groups, societies, and large publics. Prerequisite: Sociology 100.

3 hours	D1	11	M	94	
		11	WF	82	

ANTHROPOLOGY

Anthrop. 102. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of Anthropology. Prerequisite: Sophomore standing.

3 hours	R1	12	Tu	25	Endleman
		1	TT	25	Endleman
	U1	4	MTT	97	Endleman

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

4 hours	A1	8	TWTF	227	Tort

Spanish 101. ELEMENTARY SPANISH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B1	9	TWTF	225	Marsh
	C1	10	TWTF	225	Marsh
	E1	12	TWTF	227	Tort
	J1	4	TWTF	225	

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

4 hours	C1	10	TWTF	227	Tort

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

4 hours	B1	9	TWTF	227	Tort
	F1	1	TWTF	225	Marsh
	H1	3	TWTF	227	Patlogan

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

4 hours	D1	11	TWTF	227	Patlogan
	H1	3	TWTF	225	

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

2 hours	G1	2	WF	227	Patlogan

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

3 hours	D1	11	MWF	225	Marsh

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

No credit

GROUP REMEDIAL SPEECH:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
Sept. 25 - Nov. 8	M1	9	TT	201	Hoskins
Nov. 13 - Jan. 17	M2	9	TT	201	Hoskins
Sept. 25 - Nov. 8	N1	10	TT	201	Hoskins
Nov. 13 - Jan. 17	N2	10	TT	201	Hoskins

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

3 hours	A1	8	MWF	217	Evans
	B1	9	MWF	219	Evans
	C1	10	MWF	217	Hoskins
	C2	10	MWF	219	Wright
	D1	11	MWF	209	Hovde
	E1	12	MWF	219	Thompson
	F1	1	MWF	217	Hovde
	F2	1	MWF	219	Crews
	G1	2	MWF	219	Thompson
	G2	2	MWF	217	Hovde
	H1	3	MWF	219	Crews
	J1	4	MWF	219	Crews
	M1	9	MTT	217	Hovde
	N1	10	MTT	209	Goulson
	N2	10	MTT	206	Pitt
	P1	11	MTT	219	Crews
	P2	11	MTT	206	Evans
	Q1	12	MTT	209	Goulson
	R1	1	MTT	216	Pitt
	T1	3	MTT	217	Pitt
	U1	4	MTT	217	Pitt

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	B1	9	MWF	206	Hoskins
	E1	12	MWF	217	Rigler

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	P1	11	TT	217	Hovde

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Q1	12	TT	219	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	D1	11	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretations, analysis, and oral reading of prose literature and verse. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	M1	9	TT	219	Evans
	N1	10	TT	219	Crews
	R1	1	TT	219	Goulson

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 143.

2 hours	N1	10	TT	144
	R1	1	TT	144

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

4 hours	C1	10	MWTF	113
	F1	1	MWTF	113

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

5 hours	E1	12	MTWTF	113
	H1	3	MTWTF	113

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 123. For architecture students ONLY.

3 hours	J1	4	MWF	113

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T. A. M. 150.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	113	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T. A. M. 150, 154 or 156.

3 hours	A1	8	MWF	113	
	E1	12	MWF	134	

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T. A. M. 221.

1 hour	Lab. A	10-12	M	61
	Lab. B	8-10	Tu	61
	Lab. C	3-5	Tu	61
	Lab. D	3-5	Th	61

IDEN. NUMBER_____

Name in full_____
[Print] [Last name first; then given names]

Address_____
(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____

Date_____
College_____
Curriculum_____

Examiner and Recorder's Stamp Here

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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TIME TABLE

SECOND SEMESTER, 1956-57

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TABLE OF CONTENTS

Pre-Registration Advisement Schedule 3
Calendar, Second Semester, 1956-57 4
Second Semester, Registration Schedule 5
Legend for Section Letters 6
Schedule of Tuition and Fees 6
Chicago Undergraduate Division Calendar, 1957 7
Urbana Calendar, 1957 8
Accountancy 9
Anthropology 65
Architecture 10,11
Art 11,12
Biological Sciences 12-16
Business Law 16
Chemistry 16-22
Civil Engineering 22,23
Economics 23-25
Education 25
Electrical Engineering 25
English 26-28
French 28-29
General Engineering 29-31
Geography 31,32
Geology 32,33
German 33,34
History 34,35
Humanities 36
Hygiene 36,37
Management 37,38
Marketing 38
Mathematics 38-42
Mechanical Engineering 42,43
Military Sciences and Tactics 43,44
Music 44,45
Philosophy 45
Physical Education for Men 45-51
Physical Education for Women 51-53
Physical Sciences 53,54
Physics 54-56
Political Science 56,57
Psychology 57,58
Rhetoric 59-63
Social Sciences 63-64
Sociology 64,65
Spanish 65,66
Speech 67-69
Theoretical and Applied Mechanics 69-70

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PRE-REGISTRATION ADVISEMENT SCHEDULE
Second Semester, 1956-57

FORMER STUDENTS ONLY

PLACE:

Liberal Arts and Sciences..... Gymnasium
Commerce ..... Gymnasium
Engineering..... .....To be announced

A - E	Monday	February 4	1 - 4 p.m.
F - K	Tuesday	February 5	9 - 12 noon
L - Q	Tuesday	February 5	1 - 4 p.m.
R - Z	Wednesday	February 6	9 - 12 noon

Physical Education

No pre-advisement period is scheduled for Physical Education majors.

LISTING OF COURSES

The arrangment of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

CALENDAR

Second Semester, Spring, 1957

Fri., Feb. 1 - Wed., Feb. 6	Orientation Period
Thurs., Feb. 7 - Fri., Feb. 8	Registration (Students registering for less than twelve hours report at 1:00 p.m., Friday, February 8, for registration.)
Mon., Feb. 11	Instruction Begins
Thurs., Feb. 14, 1:00 p.m.	Earliest time at which program changes may be made
Fri., Feb. 22, 4:00 p.m.	Latest date of withdrawal for rebate in full
Sat., Mar. 2	University Day (University opened, 1868) (Not a holiday)
Fri., Mar. 29, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals
Fri., Apr. 5, 12:00 noon	Mid-semester grades are due
Fri., Apr. 5, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees
Thurs., Apr. 18, 6:00 p.m.	Easter Vacation Begins
Wed., Apr. 24, 8:00 a.m.	Easter Vacation Ends
Fri., May 3, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal
Fri., May 10	Honors Day
Fri., May 10	Students wihtdrawing on or after this date must petition for readmission
Thurs., May 30	Memorial Day
Fri., May 31 - Sat., June 8	Semester Examinations
Mon., June 10 9:30 a.m. - 11:30 a.m. 12:30 p.m. - 4:30 p.m.	General Educational Development Tests, College Level, Room 300 (For all veterans who entered the Spring Semester, 1957, as beginning freshmen)

REGISTRATION SCHEDULE

Second Semester, Spring, 1956-57

You are authorized to register in the Gymnasium, Navy Pier, according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 4:00 p.m., Friday, February 8, 1957, will be assessed a late registration fee of $5.00.

A - B	Thursday, February 7	8:30 a.m.
C - D	Thursday, February 7	9:30 a.m.
E - G	Thursday, February 7	11:30 a.m.
H - K	Thursday, February 7	2:00 p.m.
L - M	Friday, February 8	8:30 a.m.
N - R	Thursday, February 7	3:00 p.m.
S	Thursday, February 7	1:00 p.m.
T - Z	Thursday, February 7	10:30 a.m.

NEW STUDENTS

Students registering for less than 12 semester hours will register at 1:00 p.m., Friday, February 8. All stations will close promptly at 6:00 p.m., Thursday, February 7 and 4:00 p.m., Friday, February 8.

A - D	Friday, February 8	11:30 a.m.
E - K	Friday, February 8	1:00 p.m.
L - R	Friday, February 8	10:30 a.m.
S - Z	Friday, February 8	9:30 a.m.

All University offices will be closed Saturday, February 9, 1957.

Late registration will begin Monday, February 11, 1957.

Instruction begins Monday, February 11, 1957.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more..... $ 65.00
(Eight hours or less pay tuition of $5 a semester hour).

Non-residents of Illinois taking nine hours or more..... $ 175.00
(Eight hours or less pay tuition at rate of $12 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours..... $ 7.00
(Less than 5 hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours..... $ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours..... $ 6.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the second semester 1955-56 or the summer session 1956 must pay a General Deposit of..... $ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who pays his tuition and fees after 6:00 p.m., Friday, February 8, in the amount of..... $ 5.00

LEGEND FOR SECTION LETTERS*

Hour	5, 4, and 3 hour courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	18	Malinosky
	C1	10	MWF	38	Fox
[1]Students with 95	C2	10	MWF	18	Malinosky
or more credit hours	E1	12	MWF	16	Graff
receive only 2 hours	F1	1	MWF	24	Fox
credit.	G1	2	MWF	24	Fox
	H1	3	MWF	19	Lindhe
	J1	4	MWF	19	Lindhe
	M1	9	MTT	23	Andrews
	P1	11	MTT	22	Andrews
	R1	1	MTT	23	Malinosky
	T1	3	MTT	16	Graff

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101. Prerequisite: Accy. 101.

3 hours[1]	B1	9	MWF	22	Kabbes
	C1	10	MWF	22	Kabbes
[1]Students with 95	D1	11	MWF	16	Graff
or more credit hours	E1	12	MWF	38	Kabbes
receive only 2 hours	E2	12	MWF	19	Lipkin
credit.	F1	1	MWF	19	Andrews
	G1	2	MWF	19	Andrews
	H1	3	MWF	23	Lipkin
	N1	10	MTT	19	Lindhe
	Q1	12	MTT	18	Lindhe
	U1	4	MTT	16	Graff

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	B1	9	MWF	19	Lipkin
	D1	11	MWF	19	Lipkin
	H1	3	MWF	24	Schneider
	J1	4	MWF	24	Schneider

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

Accy. 108. INTERMEDIATE ACCOUNTING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	24	Schneider
	E1	12	MWF	22	Schneider
	G1	2	MWF	22	Kabbes
	T1	3	MTT	21	Malinosky

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	11	W	251	Walley
	Lab. A7	3-5	MTTF	241	Masterton
	Lab. D7	10-12	MTTF	241	Walley
	Lab. E7	8-10	MTTF	241	Walley
	Lab. F7	12-2	MTTF	241	Masterton

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. D	11	MF	251	Radice

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and G. E. 108.

3 hours	Lec.	2	W	251	Rathbun
	Lab. A	9-11	MTTF	241	Rathbun
	Lab. B	3-6	TT	241	Rathbun
		3-5	W	241	

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of the fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

3 hours	Lec.	1	W	251	DeFilipps
	Lab. A	8-11	MF	242	DeFilipps
		10-12	W		DeFilipps

Arch. 132. ARCHITECTURAL DESIGN:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. B	8-11	TT	242	DeFilipps
		8-10	W	242	DeFilipps
	Lab. C	2-5	MF	242	White
		2-4	W	242	White

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	8-11	TWT	242	White

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	Lec. E	1	TT	251	Mikolajczyk

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lec. F	1	MF	251	Mikolajczyk

ART

Art 112. INTRODUCTION TO RENAISSANCE AND MODERN ART:- Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. Prerequisite: Sophomore standing.

3 hours	Lec. G	3	MWF	251	Radice

Art 115. ART APPRECIATION:- An introduction to the factors inherent in architecture, sculpture, painting and other arts. Primarily for non-art students. Prerequisite: Sophomore standing.

Art 115. ART APPRECIATION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. H	9	MWF	251	Radice

Art 181. FREEHAND DRAWING:- Primarily for students in architecture.

2 hours	Lab. A6	10-12	MWF	83
	Lab. B6	8-10	MWF	83
	Lab. C6	3-5	MWF	83
	Lab. D	1-3	MWF	83
	Lab. E	9-12	TT	83

Art 182. FREEHAND DRAWING:- Primarily for students in architecture; Prerequisite: Art 181.

2 hours	Lab. A7	8-10	MWF	84
	Lab. B	10-12	MWF	84
	Lab. C7	3-5	MWF	84
	Lab. D7	3-6	TT	84
	Lab. E	11-2	TT	84
	Lab. F7	8-11	TT	84
	Lab. G	1-3	MWF	84

Art 183. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 182.

2 hours	Lab. A	11-2	MF	91
	Lab. B	2-5	MF	91

Art 184. FREEHAND DRAWING:- Primarily for students in architecture. Prerequisite: Art 183.

2 hours	Lab. A	8-11	TT	91
	Lab. B	8-11	MF	91
	Lab. C	3-6	TT	91

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures and laboratory. Credit will not be given for both Biology 101 and D.G.S. 131. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R1	1	TT	218	Pickett
	Lab. 1	3-5	TT	44	Parthasarathy
	Lab. 2	8-10	TT	46	Presley
	Lab. 3	10-12	TT	46	Presley
	Lab. 4	8-10	TT	48	Yokoyama
	Lab. 5	12-2	WF	48	Chapp
	Lab. 6	2-4	W	48	Chapp
			F	46	
	Lec. M1	9	TT	218	Glassman
	Lab. 7	8-10	MW	48	Yokoyama
	Lab. 8	10-12	M	48	Glassman
			F	46	
	Lab. 9	12-2	M	48	Scudder
			F	46	
	Lab. 10	12-2	TT	48	Chapp
	Lab. 11	4-6	MF	48	Parthasarthy
	Lab. 12	8-10	MW	46	Presley
	Lec. T1	3	TT	210	Little
	Lab. 13	10-12	MW	46	Yokoyama
	Lab. 14	12-2	MW	46	W. J. Dembski
	Lab. 15	2-4	MW	46	Little
	Lab. 16	4-6	MW	46	Little
	Lab. 17	12-2	TT	46	W. J. Dembski
	Lab. 18	4-6	TT	46	Little

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:- Application of biological principles to the living world. Lectures and laboratory. Prerequisite: Biology 101. Credit will not be given for both Biology 102 and D. G. S. 132. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

4 hours[1]	Lec. Q1	12	TT	210	Staff
	Lab. 1	8-10	MW	43	Madison-Rouffa
	Lab. 2	10-12	MW	43	Presley
	Lab. 3	2-4	MF	43	Scudder
	Lab. 4	4-6	MW	43	W. J. Dembski
	Lab. 5	10-12	M	44	Parthasarathy
			F	43	

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 6	12-2	M	44	Parthasarathy
			F	43	Parthasarathy
	Lab. 7	3-5	TT	43	Scudder
	Lec. E1	12	WF	210	Staff
	Lab. 8	10-12	TT	43	Glassman
	Lab. 9	12-2	TT	43	Parthasarathy
	Lab. 10	8-10	M	44	Scudder
			F	43	
	Lab. 11	2-4	M	44	Yokoyama
			W	43	
	Lab. 12	10-12	TT	44	Chapp
	Lab. 13	12-2	TT	44	Yokoyama
	Lab. 14	8-10	WF	44	Glassman-Shomay

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures and laboratory. Prerequisite: Biology 101.

4 hours[1]	Lec. M1	9	TT	210	Rouffa
	Lab. 1	10-12	TT	48	Rouffa
	Lab. 2	3-5	TT	48	Chapp

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY):- Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, and laboratory. Prerequisite: Biology 101 and 111.

4 hours[1]	Lec. G1	2	MF	48	Rouffa
	Lab. 1	10-12	WF	48	Rouffa

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 101.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. R1	1	TT	65	Madison
	Lab. 1	8-10	TT	43	Madison

[1]Students with 95 or more credit hours receive only 3 credit hours.

Biology 126. ADVANCED GENERAL BACTERIOLOGY:- General technic, special apparatus and methods. Lectures and laboratory. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.

4 hours[1]	Lec. N1	10	TT	45	Madison
	Lab. 1	8-10	TT	43	Madison

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Prerequisite: Biology 101.

4 hours[1]	Lec. N1	10	TT	210	Shomay
	Lab. 1	8-10	TT	44	Shomay
	Lab. 2	10-12	WF	44	Shomay

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures and laboratory. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

5 hours	Lec. D1	11	MWF	210	Shank
	Lab. 1	8-10	MWF	45	Spirakis
	Lab. 2	12-2	MWF	45	Spirakis
	Lab. 3	2-4	MWF	45	Spirakis

Biology 136. BIRD STUDY:- Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lec. M1	9	Tu	45	Shank
	Lab. 1	8-10	Th	45	Shank

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. F1	1	MWF	210	Sangster
	Lab. 1	10-12	MWF	45	Sangster
	Lab. 2	11-2	TT	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	B1	9	MWF	38	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2 1/2 units of entrance credit in mathematics, or in Mathematics 111 or 112.

5 hours[1]	Lec. C	10	MW	204	Lestina
	Lab. 1	8-10	MWF	53	Johnson
	Quiz 1	8	TT	74	Johnson
	Lab. 2	12-2	MWF	53	Lestina-Heller
	Quiz 2	10	TT	74	Lestina
	Lab. 3	2-4	MWF	53	Farag
	Quiz 3	4	TT	75	Farag

[1] Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 101. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 4	9-12	TT	53	Johnson-Lothian
	Quiz 4	11	WF	74	Johnson

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

Credit					
3 hours[1]	Lec. N	10	TT	204	Mueller
	Lab. 11	8-10	F	53	Mueller
[1]Students with 95 or more credit hours receive only 2 hours credit.	Quiz 11	9	TT	74	Mueller
	Lab. 12	10-12	M	53	Seabright
	Quiz 12	10	WF	74	Seabright
	Lab. 13	12-2	Th	53	Mueller
	Quiz 13	1	WF	74	Mueller
	Lab. 14	3-5	Tu	53	Mueller
	Quiz 14	3	WF	75	Mueller
	Lab. 15	2-4	M	53	Carbonaro
	Quiz 15	2	WF	74	Carbonaro
	Lab. 16	1-3	F	53	Barker
	Quiz 16	1	MW	75	Barker
	Lab. 17	9-11	M	53	Cowin
	Quiz 17	10	WF	75	Cowin

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2 1/2 units of entrance credit in Mathematics 111 or 112.

Credit					
4 hours[1]	Lec. G	2	WF	204	Bachrach
	Lec. P	11	TT	204	Bachrach
[1]Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.	Lab. 21	8-10	MW	50	Farag
	Quiz 21	11	MW	75	Farag
	Lab. 22	8-10	TT	50	Fabian
	Quiz 22	8	WF	74	Fabian
	Lab. 23	10-12	WF	50	Fabian
	Quiz 23	10	TT	75	Fabian
	Lab. 24	12-2	MW	50	Bachrach
	Quiz 24	12	TT	76	Bachrach
	Lab. 25	12-2	TT	50	Stearns
	Quiz 25	3	M	75	Stearns
		3	F	74	

Chem. 103. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
**Must take Lec. G	Lab. 26	3-5	TT	50	Cowin
	Quiz 26	3	MW	76	Cowin
***Must take Lec. F	Lab. 27	4-6	MW	50	Hart
	Quiz 27	3	MW	74	Hart
	**Lab. 28	10-12	TT	50	Polli
	Quiz 28	9	TT	75	Polli
	***Lab. 29	2-4	WF	50	Lothian
	Quiz 29	3	TT	75	Lothian

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chemistry 101, 102 or 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. C	10	WF	210	Huitema
	Lec. G	2	WF	210	Huitema
	Lab. 35	8-10	WF	50	Sackheim
	Quiz 35	11	TT	74	Sackheim
	Lab. 36	9-11	TT	50	Sackheim
	Quiz 36	8	TT	76	Sackheim
	Lab. 37	10-12	TT	50	Carbonaro
	Quiz 37	11	WF	76	Carbonaro
	Lab. 38	12-2	TT	50	Huitema-Farag
	Quiz 38	12	MW	76	Huitema
	Lab. 39	12-2	WF	50	Sackheim
	Quiz 39	1	TT	76	Sackheim
	Lab. 40	3-5	TT	50	Huitema-Crum
	Quiz 40	4	MW	74	Huitema
	Lab. 41	3-5	WF	50	Stearns-Carbonaro
	Quiz 41	4	TT	76	Stearns
	Lab. 42	9-11	MW	50	Bachrach
	Quiz 42	8	WF	75	
	Lab. 43	11-1	WF	50	
	Quiz 43	12	TT	75	
	Lab. 44	1-3	WF	50	Johnson
	Quiz 44	1	TT	74	Johnson
	Lab. 45	9-11	TT	50	Perry
	Quiz 45	9	MW	74	Perry
	Lab. 46	11-1	TT	50	Perry
	Quiz 46	12	MW	75	Perry
	Lab. 47	4-6	TT	50	Rietz
	Quiz 47	3	TT	80	Rietz

[1]Credit in Chem. 104 will not be granted to students who have received credit in Chem. 105 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 48	10-12	MW	50	Miller
	Quiz 48	9	MW	76	Miller
	Lab. 49	2-4	MW	50	Perry
	Quiz 49	4	MW	75	Perry

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for student who are not eligible for Chemistry 104 and 106. Prerequisite: Chemistry 101, 102 or 103.

5 hours[1]

[1]Credit in Chem. 104 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Lec. P	11	TT	210	Hunt
Lab. 51	8-10	MWF	53	Heller
Quiz 51	8	TT	75	Heller
Lab. 52	10-12	MWF	53	Hunt
Quiz 52	9	TT	80	Hunt
Lab. 53	1-3	MWF	53	Mansfield
Quiz 53	1	TT	80	Mansfield
Lab. 54	3-5	MWF	53	Hunt-Savoy
Quiz 54	3	TT	76	Hunt
Lab. 55	8-11	TT	53	
Quiz 55	10	WF	80	
Lab. 56	3-6	TT	53	Savoy
Quiz 56	3	WF	80	Savoy

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in curricula in chemistry, chemical engineering, and chemistry majors who are not premedical students. Prerequisite: Chemistry 101, 102 or 103.

5 hours[1]

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Lec. H	3	WF	204	Rietz
Lab. 61	9-12	TT	53	Seabright
Quiz 61	9	MW	75	Seabright
Lab. 62	1-3	MWF	53	Stearns
Quiz 62	3	TT	74	Stearns

Chem. 108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Chem. 107.

Chem. 108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. N	10	TT	65	Weldon
	Lab. 71	10-12	MWF	53	Barker
[1]Students with 95	Quiz 71	11	TT	75	Barker
or more credit hours	Lab. 72	1-3	MWF	53	Weldon
receive only 3 hours	Quiz 72	9	TT	76	Weldon
credit.					

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry, graduation from high school in the upper quarter of the high school class, and high placement score.

5 hours[1]	Lec. F	1	MWF	204	Schrage
	Lab. 66	9-12	Tu	50	Heller
	Quiz 66	1	TT	75	Heller

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students - required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106.

5 hours	Lec. T	3	TT	65	Mansfield
	Lab. 76	10-12	M	53	Mansfield
		9-12	WF	53	
	Quiz 76	11	TT	76	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. For all students in home economics and premedical courses and all others who have not followed the sequence of Chemistry 101, 102 or 103, 106, and 110. Prerequisite: Chemistry 104, 105, or 106.

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. Q	12	TT	204	Babler
	Lab. 81	8-11	MWF	54	Lothian
	Quiz 81	10	Tu	76	Lothian
	Lab. 82	3-6	MWF	54	Potempa
	Quiz 82	4	Th	74	Potempa
	Lab. 83	10-1	MWF	54	Gottlieb-Farag
	Quiz 83	10	Th	76	Gottlieb

Chem. 123. QUANTITATIVE ANALYSIS FOR ENGINEERS:- A course in quantitative analysis designed for the needs of engineers, especially ceramic and metallurgical. Prerequisite: Chemistry 104 or 105.

5 hours	Lec. Q	12	TT	65	Gottlieb
	Lab. 85	2-5	MWF	54	Gottlieb
	Quiz 85	4	Tu	74	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- Gravimetric and volumetric analysis, modern advanced theory and practice. For all students other than those specified for Chemistry 122 and 123. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. T	3	TT	204	Babler
	Lab. 86	12-3	MWF	54	Babler-Lothian
	Quiz 86	11	M	74	Babler

Chem. 132. ELEMENTARY ORGANIC CHEMISTRY:- This course does not satisfy the organic chemistry prerequisite for Chem. 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum and in the continuation nursing curriculum. Prerequisite: Chem. 101 or 102, or equivalent.

3 hours	Lec. E	12	WF	65	Weldon
	Lab. 74	8-11	F	52	R. L. Miller
	Quiz 74	12	Th	74	R. L. Miller

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chem. 105 or 110.

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	
	Lab. 91	8-11	MW	52	Carbonaro
	Quiz 91	9	F	74	Carbonaro
	Lab. 92	2-5	MW	52	Seabright
	Quiz 92	2	F	75	Seabright
	Lab. 93	8-11	TT	52	Barker
	Quiz 93	8	F	76	Barker

Chem. 234. ORGANIC CHEMISTRY:- For students whose major is chemistry, or for those registered in the curriculum of chemistry or chemical engineering. Prerequisite: Chem. 124.

5 hours	Lec. R	1	TT	210	Crum
	Lab. 95	9-12	MW	52	Crum
	Quiz 95	10	F	76	Crum

Chem. 247. ELEMENTARY PHYSICAL CHEMISTRY:- For premedical students only. Lectures and laboratory. Prerequisite: Chem. 122 and 133; Physics 102 or 104, or equivalent.

4 hours	Lec. D	11	MWF	65	Schrage
	Lab. 96	8-11	Th	50-A	Schrage

CIVIL ENGINEERING

C. E. 106. SURVEYING:- Prerequisite: C. E. 105. Credit or registration in G. E. 111.

3 hours	Lec. M	9	TT	63	Coe
	Lab. A	9-12	M	63	Pabarcius
	Lab. B	9-12	F	63	Pabarcius

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	Lec. G	2	MWF	63	Coe

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering or architecture.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lab. A	10-12	MW	61	Coe
	Lab. B	10-12	TT	61	Coe

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	C1	10	MWF	17	O. Miller
	D1	11	MWF	21	Geldard
	F1	1	MWF	18	Geldard
	G1	2	MWF	18	Geldard
	H1	3	MWF	18	Kaucki
	J1	4	MWF	18	Kaucki
	M1	9	MTT	17	O. Miller
	P1	11	MTT	23	Grampp
	T1	3	MTT	38	Grampp

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	B1	9	MWF	16	J. R. Morris
	D1	11	MWF	18	J. R. Morris
	G1	2	MWF	17	Jung
	N1	10	MTT	23	Grampp
	R1	1	MTT	38	Grampp

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	C1	10	MWF	20	Shaw
	E1	12	MWF	24	Gillett
	G1	2	MWF	23	Gillett
	H1	3	MWF	20	Shaw
	R1	1	MTT	17	Williams

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

Econ. 108. ELEMENTS OF ECONOMICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	38	Dunne
	F1	1	MWF	20	O. Miller
	G1	2	MWF	38	Dunne
	P1	11	MTT	17	Kaucki
	Q1	12	MTT	20	O. Miller
	R1	1	MTT	22	Kaucki

Econ. 136. AMERICAN ECONOMIC HISTORY:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. Open only to freshmen and sophomores.

3 hours	C1	10	MWF	16	Williams
	D1	11	MWF	20	Shaw
	E1	12	MWF	21	Jung
	E2	12	MWF	17	Williams
	G1	2	MWF	20	Shaw
	J1	4	MWF	38	Jung
	M1	9	MTT	21	Knudson
	T1	3	MTT	17	Williams

Econ. 138. EUROPEAN ECONOMIC HISTORY:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open only to freshmen and sophomores.

3 hours	B1	9	MWF	20	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108. Sophomore standing. Commerce students are required to elect Econ. 170 and will not be allowed credit for Psych. 135 or Math. 161.

3 hours	B1	9	MW	33	Derrick
	Prac. I	9-11	F	33	Derrick
	D1	11	MW	33	Derrick
	Prac. II	11-1	F	33	Derrick

Econ. 170. ELEMENTS OF STATISTICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	G1	2	MW	33	Derrick
	Prac. III	2-4	F	33	Derrick
	N1	10	MTu	33	Larson
	Prac. IV	9-11	Th	33	Larson
	R1	1	MTu	33	Larson
	Prac. V	12-2	Th	33	Larson

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE:- This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	T1	3	TT	28	Ricks

Ed. 109. EDUCATIONAL PSYCHOLOGY:- The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Prerequisite: Psychology 100.

3 hours	R1	1	MTT	28	Ricks

ELECTRICAL ENGINEERING

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Physics 107 and Math. 143.

4 hours	Quiz B1	9	MWF	113
	Lab. B	9-12	Tu	120
	Quiz F1	1	MWF	113
	Lab. F	3-6	Th	120

ENGLISH

Engl. 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121, 122, and 123. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	215	Freyer
	D1	11	MWF	214	Greenwald
	E1	12	MWF	216	Schiller
	G1	2	MWF	216	Atwood
	M1	9	MTT	205	Jackman
	N1	10	MTT	211	Nicholas
	T1	3	MTT	216	J. Johnson

Engl. 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

3 hours	A1	8	MWF	216	I. Miller
	D1	11	MWF	216	Blum
	F1	1	MWF	216	Gallagher
	H1	3	MWF	215	Stronks
	J1	4	MWF	216	Mackin
	N1	10	MTT	214	S. Miller
	R1	1	MTT	214	Willett
	U1	4	MTT	215	Love

Engl. 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's PRIDE AND PREJUDICE, Dostoevski's CRIME AND PUNISHMENT, Hardy's RETURN OF THE NATIVE, Conrad's VICTORY, and Hemingway's A FAREWELL TO ARMS. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

3 hours	B1	9	MWF	209	Hipple
	C1	10	MWF	209	Kerwick

Engl. 103. INTRODUCTION TO FICTION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	MWF	211	Karanikas
	G1	2	MWF	215	Stronks
	H1	3	MWF	211	Crawley
	J1	4	MWF	214	Atwood
	L1	8	MTT	209	Leonhard
	P1	11	MTT	209	Leonhard
	Q1	12	MTT	209	Griest
	T1	3	MTT	209	Cassell

Engl. 113. AMERICAN LITERATURE:- Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	A1	8	MWF	212	Wright
	G1	2	MWF	212	Karanikas

Engl. 114. AMERICAN LITERATURE:- Classic American authors after the Civil War: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	B1	9	MWF	212	Wright
	G1	2	MWF	211	Jordan
	P1	11	MTT	212	Runyan

Engl. 121. CHIEF ENGLISH WRITERS BEFORE 1800:- CANTERBURY TALES, UTOPIA, two plays of Shakespeare, PARADISE LOST, GULLIVER'S TRAVELS, TOM JONES, RASSELAS. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	F1	1	MWF	215	Kogan

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's PAST AND PRESENT, Arnold's prose and poetry, GitzGerald's THE RUBAIYAT OF OMAR KHAYAAM, readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineer-

Engl. 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- (Concluded). ing, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	215	Jordan

Engl. 123. CHIEF MODERN ENGLISH WRITERS:- Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit is not given for English 123 in addition to English 101, 102, and 103. This course, together with English 121 and 122, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	E1	12	MWF	215	Waller

Engl. 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	C1	10	MWF	215	Vest

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

4 hours	A1	8	TWTF	224	Skogen
	B1	9	TWTF	226	Lenihan
	C1	10	TWTF	224	Skogen
	E1	12	TWTF	226	Cowles
	H1	3	TWTF	226	Cowles
	J1	4	TWTF	226	Meyer

French 102. ELEMENTARY COURSE:- Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

4 hours	B1	9	TWTF	224	Skogen
	C1	10	TWTF	226	Lenihan

French 102. ELEMENTARY COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D1	11	TWTF	226	Cowles
	F1	1	TWTF	228	Patlogan
	H1	3	TWTF	228	Meyer

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102 or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	E1	12	TWTF	228	Skogen

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103 or three years of high school French.

4 hours	C1	10	TWTF	228	Schuyler
	F1	1	TWTF	226	Cowles

French 202. INTRODUCTION TO FRENCH LITERATURE:- Continuation of French 201. Prerequisite: French 104 or four years of high school French.

3 hours	D1	11	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane geometry.

3 hours	A1	8-10	MWF	135
	B1	10-12	MWF	135
	C1	12-2	MWF	135
	C2	12-2	MWF	136
	D1	2-4	MWF	135
	F1	8-11	TT	135
	F3	8-11	TT	137
	F6	8-11	TT	145
	G1	11-2	TT	135
	G3	11-2	TT	137

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane geometry.

3 hours	A3	8-10	MWF	137

G. E. 102. ENGINEERING GEOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	A4	8-10	MWF	141	
	A5	8-10	MWF	143	
	B2	10-12	MWF	136	
	B3	10-12	MWF	137	
	B4	10-12	MWF	141	
	B5	10-12	MWF	143	
	C3	12-2	MWF	137	
	C4	12-2	MWF	141	
	C5	12-2	MWF	143	
	D2	2-4	MWF	136	
	D3	2-4	MWF	137	
	D4	2-4	MWF	141	
	D5	2-4	MWF	143	
	F4	8-11	TT	141	
	F5	8-11	TT	143	
	G4	11-2	TT	141	

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145
	B6	10-12	MWF	145
	C6	12-2	MWF	145

G. E. 108. ARCHITECTURAL PROJECTIONS:- Prerequisite: G. E. 107.

2 hours	A7	8-10	MWF	146
	B7	10-12	MWF	146
	C7	12-2	MWF	146
	D7	2-4	MWF	146
	F7	8-11	TT	146

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G. E. 101 and G. E. 102.

2 hours	G7	11-2	TT	146

G. E. 112. GENERAL ENGINEERING TECHNOLOGY:- Prerequisite: G. E. 101 and G. E. 102.

2 hours	A2	8-10	MWF	136
	F2	8-11	TT	136

G. E. 210. INDUSTRIAL PRODUCTION ILLUSTRATION:- Prerequisite: G. E. 102 or G. E. 107 and 108.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D6	2-4	MWF	145	

G. E. 212. GRAPHICAL CALCULATIONS:- Prerequisite: G. E. 101 and Math. 123.

1 hour	P2	11	TT	136	
	R2	1	TT	136	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climates, climatic regions, landforms, natural resources. Geog. 101 and 111 meet the general education requirement in the physical sciences, and Geog. 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences.

5 hours[1]	Lec. N1	10	TT	218	Cutshall
	Quiz A1	8	MWF	13	Finney
	Quiz C1	10	MWF	13	Finney
	Quiz G1	2	MWF	14	Finney
	Quiz P1	11	MTT	13	Cutshall

[1]Students with 95 or more credit hours receive only 4 hours credit.

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world: regional patterns of settlement and land utilization; Man's occupancy of the world. Prerequisite: Geog. 101 or consent of instructor.

3 hours[1]	N1	10	TTF	14	Colby
	R1	1	MTT	13	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	E1	12	MWF	13	Finney

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere, its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Prerequisite: Geog. 101 or consent of instructor.

3 hours	A1	8	MWF	14	Rheumer
	B1	9	MWF	13	Rheumer
	G1	2	MWF	13	Rheumer

Geog. 114. CONSERVATION OF NATURAL RESOURCES:- Regional aspects of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis on the United States. Prerequisite: Sophomore standing.

3 hours	D1	11	MWF	14	Rheumer

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features, of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

4 hours[1]	Lec. R	1	TT	204	Karpinski
	Lab. 1	10-12	M	42	Kurs
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 1	10	W	42	Kurs
	Lab. 2	8-10	Tu	42	DeMar
	Quiz 2	8	Th	42	DeMar
	Lab. 3	3-5	M	42	Kurs
	Quiz 3	4	F	42	Kurs
	Lab. 4	2-4	W	42	Kurs
	Quiz 4	2	F	42	Kurs
	Lab. 5	12-2	F	42	Kurs
	Quiz 5	1	W	42	Kurs

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 141.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. H	3	WF	65	DeMar
	Lab. 11	11-1	Th	42	DeMar
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz 11	12	Tu	42	DeMar
	Lab. 12	3-5	Tu	42	DeMar
	Quiz 12	3	Th	42	DeMar

Geol. 132. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: Geol. 131.

4 hours	Lab.-Discussion	8-10	MWF	42-53	Kurs

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	Lec. D	11	MW	204	Karpinski
	Lab. 21	10-12	Tu	42	Karpinski
	Lab. 22	9-11	Th	42	Karpinski
	Lab. 23	1-3	M	42	Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

4 hours	A1	8	TWTF	220	Hartoch
	B1	9	TWTF	220	Teichmann
	C1	10	TWTF	220	Hartoch
	D1	11	TWTF	220	Macdonald
	E1	12	TWTF	220	Braunfeld
	F1	1	TWTF	220	Macdonald
	H1	3	TWTF	220	Braunfeld

German 102. ELEMENTARY COURSE:- Continuation of German 101. Oral practice, reading and grammar. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

Credit	Section	Hours	Days	Room	Instructor
4 hours	A1	8	TWTF	221	Willner
	B1	9	TWTF	221	Willner
	C1	10	TWTF	221	Vardaman
	D1	11	TWTF	221	Teichmann
	E1	12	TWTF	221	Kauf
	E2	12	TWTF	225	Macdonald
	F1	1	TWTF	221	Teichmann
	H1	3	TWTF	221	Macdonald
	J1	4	TWTF	221	Kauf

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German.

4 hours	C1	10	TWTF	222	Willner
	E1	12	TWTF	222	Willner
	F1	1	TWTF	222	Kauf

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	223	Hartoch
	C1	10	TWTF	223	Teichmann
	D1	11	TWTF	223	Braunfeld
	E1	12	TWTF	223	Hartoch
	F1	1	TWTF	223	Braunfeld
	H1	3	TWTF	223	Kauf

German 210. MASTERPIECES OF GERMAN LITERATURE:- Introduction to German literature, in subjects, forms, and ideals. Prerequisite: German 104, 144, two years of college German, or equivalent.

3 hours	D1	11	MWF	222	Vardaman

HISTORY

Hist. 112. HISTORY OF WESTERN CIVILIZATION, 1815 TO THE PRESENT:- Development of European nationalism, liberalism, and imperialism; World Wars I and II; reconstruction. (Lectures and quiz sections in this course are coordinate. The quiz section must be chosen from one of the group listed directly beneath the particular lecture hour selected).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. D1	11	TT	218	Nicholson
	Quiz F1	1	WF	28	Goodman
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz M1	9	TT	28	Nicholson
	Quiz N1	10	TT	17	Goodman
	Quiz R1	1	TT	37	Nicholson
	Quiz G1	2	WF	37	Goodman
	Lec. F1	1	MW	218	Unfer
	Quiz G2	2	MW	97	Unfer
	Quiz J1	4	MW	97	Unfer
	Quiz M2	9	TT	82	Unfer
	Quiz P1	11	TT	37	Unfer
	Quiz T1	3	TT	97	Goodman

Hist. 132. HISTORY OF ENGLAND, 1688 TO THE PRESENT:- A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1688 to the present.

4 hours[1]	M1	9	MTWT	97	S. Jones
	P1	11	TWTF	97	Goodman
	R1	1	MTWT	97	S. Jones

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO THE PRESENT:- A century of national life and organization. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	Riddle
	Quiz M1	9	TT	37	Riddle
	Quiz N1	10	TT	82	Bill
	Quiz N2	10	TT	22	S. Jones
	Quiz P1	11	TT	82	Bill
	Quiz Q1	12	TT	37	S. Jones
	Quiz R1	1	TT	215	Unfer

Hist. 182. THE ANCIENT WORLD:- Rome. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Q1	12	TTF	97	Nicholson

HUMANITIES

Humanities 102. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103 This course, plus Humanities 101, satisfies the general education requirement in the humanities. Prerequisite: Humanities 101.

4 hours	B1	9	TWTF	206	Blum
	C1	10	TWTF	206	Kogan

Humanities 152. THE HERITIAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, and 103. This course, plus Humanities 151, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	D1	11	TWTF	215	Schiller
	F1	1	TWTF	212	Vardaman

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Staff: Drs. Erskine, Reid, Kostka, Lindsay, Lyon, Mabilangan, Glicklich, Liang, Trevino and Perez.

2 hours[1]	(For Women)				
	N	10	TT	213	Staff

[1]Students with 95 or more credit hours receive only 1 hour credit.

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	P	11	TT	213	Staff
	C	10	WF	213	Staff
	(For Men)				
	A	8	MW	213	Staff
	B	9	MW	213	Staff
	F	1	MW	213	Staff
	G	2	MW	213	Staff
	H2	3	MW	218	Staff
	J2	4	MW	218	Staff
	L	8	TT	213	Staff
	M	9	TT	213	Staff
	N2	10	TT	251	Staff
	P2	11	TT	251	Staff
	Q	12	TT	213	Staff
	R	1	TT	213	Staff
	T	3	TT	213	Staff
	U	4	TT	213	Staff

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]	(For Women)				
	D	11	WF	213	Staff
	(For Men)				
	H	3	MW	213	Staff
	J	4	MW	213	Staff

[1]Students with 95 or more credit hours receive only 1 hour credit.

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours[1]	P	20	Spies

[1]Students with 95 or more credit hours receive only 1 hour credit.

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	24	Gillett
	D1	11	MWF	24	Gillett
	F1	1	MWF	16	J. R. Morris
	G1	2	MWF	16	J. R. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	E1	12	MWF	23	Knudson
	G1	2	MWF	21	Knudson
	N1	10	MTT	21	Knudson
	T1	3	MTT	22	Larson

MATHEMATICS

Math. 101. BASIC MATHEMATICS:- A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Sciences students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry.

3 hours	C1	10	MWF	100	Olsen
	F1	1	MWF	80	Ragland

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MTWTF	94	Iverson
	A2	8	MTWTF	96	Kuzmanic
	A3	8	MTWTF	100	Ockert
	B1	9	MTWTF	94	Sjoblom
	B2	9	MTWTF	96	Lumley
	B3	9	MWF	100	Nolan

[1] Students having 1 1/2 entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	C1	10	MTWTF	96	Sears
	C2	10	MTWTF	94	Kuzmanic
	D1	11	MTWTF	94	Sjoblom
	D2	11	MTWTF	96	Ballard
	E1	12	MTWTF	111	Murphy
	E2	12	MTWTF	94	Olsen
	E3	12	MTWTF	96	Sears
	F1	1	MTWTF	94	Ziomek
	G1	2	MWF	100	Ragland
	H1	3	MTWTF	102	Hill
	H2	3	MTWTF	94	Gordon
	H3	3	MTWTF	111	Lariviere
	J1	4	MTWTF	100	Gordon
	J2	4	MTWTF	94	Cullen
	J3	4	MTWTF	111	Lariviere
	P1	11	M	80	Ragland
			TT	110	
	T1	3	M	80	Ziomek
			TT	101	

Math. 106. SOLID GEOMETRY:- Prerequisite: Entrance algebra, 1 unit; plane geometry; 1 unit.

3 hours	G1	2	MWF	94	Alberti

Math. 108. PLANE GEOMETRY:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No credit	D1	11	MWF	104	Stelling
	G1	2	MWF	111	Sears

Math. 110. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Math. 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Math. 109.

Math. 110. FUNDAMENTALS OF MATHEMATICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	D1	11	MTWT	102	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1 1/2 units, or Math. 103; plane geometry, 1 unit, or Math. 108.

3 hours[1]	A1	8	MWF	111	Lumley
	A2	8	MWF	102	Sjoblom
[1] Students with 95 or more credit hours receive only 2 hours credit.	*B1	9	MWF	111	Iverson
	B2	9	MWF	102	Kuzmanic
	*D1	11	MWF	111	Nolan
	E1	12	MWF	101	Curtis
	*E2	12	MWF	134	Stelling
*For Commerce Students Only	F1	1	MWF	101	Feinstein
	F2	1	MWF	100	Cullen
	*G1	2	MWF	102	Berglund
	G2	2	MWF	103	Murphy
	G3	2	MWF	104	Wiley
	G4	2	MWF	106	Ziomek
	H1	3	MWF	101	Dinkines
	H2	3	MWF	100	Cullen
	*J1	4	MWF	102	Ziomek
	J2	4	MWF	106	Pennisi
	M1	9	M	80	Vedral
			TT	100	
	M2	9	M	144	Stelling
			TT	101	
	N1	10	M	76	Feinstein
			TT	100	
	N2	10	M	80	Nolan
			TT	105	
	P1	11	M	76	Curtis
			TT	111	
	P2	11	MTT	100	Berglund
	Q1	12	M	80	Dinkines
			TT	100	
	R1	1	M	144	Pennisi
			TT	111	

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1 1/2 units, or Math. 103; plane geometry, 1 unit, or Math. 108.

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	L1	8	TT	111	Ballard
	L2	8	TT	102	Sjoblom
[1]Students with 95	M1	9	TT	111	Ondrak
or more credit hours	M2	9	TT	102	Iverson
receive only 1 hour	N1	10	TT	111	Vedral
credit.	N2	10	TT	102	Murphy
	N3	10	TT	101	Ockert
	P1	11	TT	105	Olsen
	P2	11	TT	101	Kuzmanic
	P3	11	TT	104	Sears
	Q1	12	TT	101	Lariviere
	R1	1	TT	105	Ockert
	R2	1	TT	101	Wiley
	R3	1	TT	100	Cullen
	T1	3	TT	100	Cullen
	U1	4	TT	105	Alberti
	U2	4	TT	106	Hill

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Math. 111 or 112, and 114 or 115.

5 hours[1]	A1	8	MTWTF	103	Stelling
	A2	8	MTWTF	104	Vedral
[1]Students with 95	B1	9	MTWTF	103	Ockert
or more credit hours	B2	9	MTWTF	104	Olsen
receive only 4 hours	C1	10	MTWTF	103	Berglund
credit.	C2	10	MTWTF	104	Ragland
	D1	11	MTWTF	103	Ondrak
	E1	12	MTWTF	103	Ondrak
	E2	12	MTWTF	104	Vedral
	E3	12	MTWTF	102	Scholomiti
	F1	1	MTWTF	103	Nolan
	F2	1	MTWTF	104	Gordon
	H1	3	MTWTF	103	Scholomiti
	H2	3	MTWTF	104	Wiley
	J1	4	MTWTF	103	Wiley

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Math. 122 or 123.

Math. 133. CALCULUS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	105	Curtis
	A2	8	MWF	101	Ballard
	B1	9	MWF	105	Feinstein
	B2	9	MWF	101	Ondrak
	C1	10	MWF	105	Frank
	C2	10	MWF	101	Curtis
	D1	11	MWF	105	Feinstein
	D2	11	MWF	101	Dinkines
	E1	12	MWF	105	Pennisi
	F1	1	MWF	105	Berglund
	G1	2	MWF	105	Hill
	H1	3	MWF	105	Pennisi

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Math. 133.

5 hours	A1	8	MTWTF	106	Scholomiti
	B1	9	MTWTF	106	Ballard
	C1	10	MTWTF	106	Iverson
	D1	11	MTWTF	106	Frank
	E1	12	MTWTF	106	Hill
	F1	1	MTWTF	106	Alberti
	F2	1	MTWTF	102	Murphy
	H1	3	MTWTF	106	Alberti

Math. 161. STATISTICS:- Prerequisite: Math. 111 or 112; sophomore standing.

3 hours	F1	1	MWF	111	Lariviere

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS:- Prerequisite: Math. 133 and 143, or 137 and 147.

3 hours	C1	10	MWF	102	Hartley
	E1	12	MWF	100	Frank
	G1	2	MWF	101	Dinkines

MECHANICAL ENGINEERING

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in engineering or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	65	

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing.

3 hours	Lec. C	10	MF	65
	Lec. F	1	MF	65
	Lab. A	8-11	Tu	71
	Lab. B	11-2	W	71
	Lab. C	2-5	W	71

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing.

3 hours	Lec. M	9	TT	65
	Lec. P	11	TT	65
	Lec. G	2	MF	65
	Lab. A	11-2	M	64
	Lab. B	11-2	W	64
	Lab. C	2-5	F	64

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:- American Military History; and School of the Soldier and Exercise of Command. Prerequisite: Approval of the Military Science Department.

1 hour	Theory 1X	9	MW	116	O'Neill
	Theory 2X	9	TT	116	McClenahan
	Theory 3X	10	MW	116	O'Neill
	Theory 4X	10	TT	116	McClenahan
	Theory 5X	11	MW	116	O'Neill
	Theory 6X	11	TT	116	McClenahan
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 104. SOPHOMORE BASIC DRILL AND THEORY:- Crew-served weapons and gunnery; Elementary communication; and School of the Soldier and Exercise of Command. Prerequisite: M. S. 101 and M. S. 102 or approval of the Military Science Department.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	230	DeRoche
	Theory 2X	9	TT	230	DeRoche
	Theory 3X	11	MW	230	DeRoche
	Theory 4X	10	TT	230	DeRoche
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F		

Mil. Sci. 206. JUNIOR ADVANCED INFANTRY DRILL AND THEORY:- Maps and aerial photographs; Mine warfare; Field fortifications; Tactics-infantry battalion in attack and defense; Crew served weapons and gunnery; and School of the Soldier and Exercise of Command. Prerequisite: Mil. Sci. 103 and 104, successful completion of Armed Forces qualification test, officer-type physical examination and approval of Military Science Department.

3 hours	Theory X	12	MTWT	230	McClenahan
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

MUSIC

Music 150. MUSIC ENSEMBLE:- Section A, Band; Section B, Orchestra; Section C, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Suitable instruments of most kinds are available for free use by students.

1/2 hour	A	*2	TT	***354	Zahrt

*Band rehearsals often continue for a part or all of the three o'clock hour for students able to arrange their schedules to permit this, but while attendance during the three o'clock is desired, it is not required.

**Students unable to arrange to attend Chorus meetings all three days may still participate with the consent of the director. To earn credit, attendance on two days is required.

Music 150. MUSIC ENSEMBLE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B	12	TT	354	Zahrt
	C	11	***MTT	354	Ockert

***Students unable to arrange to attend Chorus meetings all three days may still participate with the consent of the director. To earn credit, attendance on two days is required.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosphers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	82	Page
	D1	11	MWF	28	Page
	N1	10	MTT	37	D. Morris

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	28	Page
	E1	12	MWF	82	D. Morris
	G1	2	MWF	82	D. Morris
	P1	11	TT	19	D. Morris
		12	Th		

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Phil. 103 and 105. Prerequisite: Sophomore standing.

2 hours	Q1	12	TT	224	Page
	R1	1	TT	224	Page

PHYSICAL EDUCATION FOR MEN

P. E. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	C	10	MWF	Gym	Kristufek
	D	11	MWF	Gym	Rader
	E	12	MWF	Gym	Kristufek
	F	1	MWF	Gym	Fordham

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hour	A	8	MWF	Gym	Rader
	B	9	MWF	Gym	Thompson
	C	10	MWF	Gym	Gedvilas
	D	11	MWF	Gym	Strnad
	E	12	MWF	Gym	Versen
	F	1	MWF	Gym	Strnad
	G	2	MWF	Gym	Fordham
	H	3	MWF	Gym	Kent

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period. First class will meet in the men's gym.

1 hour	Lm	*8	TT	Town Club	Kristufek

*Class will meet for 1 1/2 hours.

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Class will swim at the Town Club, Sheraton Hotel. A service fee of $7.50 per student will be collected during the first class period. First class session will meet in the men's gym.

1 hour	Mn	*9	TT	Town Club	Kristufek

*Class will meet for 1 1/2 hours.

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	C	10	MWF	Gym	Frey
	D	11	MWF	Gym	Bedard
	E	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Frey

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
*Class will meet for 1 1/2 hours.	G	2	MWF	Gym	Montcalm
	Pq	*11	TT	Gym	Bedard

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	Rs	*1	TT	Gym	Bedard

*Class will meet for 1 1/2 hours. Students will be released early to participate in extra-curricular activities.

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Bedard
	D	11	MWF	Gym	Frey
*Classes will meet for 1 1/2 hours.	E	12	MWF	Gym	Frey
	F	1	MWF	Gym	Montcalm
	H	3	MWF	Gym	Montcalm
	Qr	*12	TT	Gym	Montcalm

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	L. H. Miller
	D	11	MWF	Gym	Kristufek
*Classes will meet for 1 1/2 hours.	E	12	MWF	Gym	Thompson
	F	1	MWF	Gym	Kent
	G	2	MWF	Gym	Strnad
	Pq	*11	TT	Gym	Kristufek

P. E. M. 118. WRESTLING:-

1 hour	A	8	MWF	Gym	Thompson
	B	9	MWF	Gym	Frey
*Classes will meet for 1 1/2 hours.	C	10	MWF	Gym	Thompson
	D	11	MWF	Gym	Versen
	F	1	MWF	Gym	Kristufek
**Students will be released early to participate in extra-curricular activities.	G	2	MWF	Gym	Mann
	H	3	MWF	Gym	Mann
	Lm	*8	TT	Gym	Strnad
	Rz	**1	TT	Gym	Frey

P. E. M. 120. PERSONAL DEFENSE:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	E	12	MWF	Gym	Kent
	Mn	*9	TT	Gym	Kent
*Classes will meet for	Np	*10	TT	Gym	Thompson
1 1/2 hours.	Pq	*11	TT	Gym	Kent
	Qr	*12	TT	Gym	Thompson

P. E. M. 123. WEIGHT LIFTING:-

1 hour	B	9	MWF	Gym	Bedard
	D	11	MWF	Gym	Gedvilas
*Classes will meet for	E	12	MWF	Gym	L. H. Miller
1 1/2 hours.	F	1	MWF	Gym	Versen
	G	2	MWF	Gym	Kent
**Students will be re-	H	3	MWF	Gym	Strnad
leased early to part-	Np	*10	TT	Gym	Bedard
icipate in extra-	Pq	*11	TT	Gym	Frey
curricular activities.	Rs	**1	TT	Gym	Versen

P. E. M. 129. VOLLEYBALL:-

1 hour	A	***8	MWF	Gym	Bedard
	B	***9	MWF	Gym	Rader
*Classes will meet for	Lm	*8	TT	Gym	Rader
1 1/2 hours.	Mn	*9	TT	Gym	Strnad
	Np	*10	TT	Gym	Mann
**Students will be re-	Pq	*11	TT	Gym	Montcalm
leased early to part-	Qr	*12	TT	Gym	Fordham
icipate in extra-	Rs	**1	TT	Gym	Montcalm
curricular activities.					

***Adaptive only.

P. E. M. 130. BEGINNING BASKETBALL:- Prerequisite: P. E. M. 106 and recommendation of the instructor.

C	10	MWF	Gym	Rader
E	12	MWF	Gym	Gedvilas
F	1	MWF	Gym	L. H. Miller

P. E. M. 132. ARCHERY:-

Credit	Section	Hours	Days	Room	Instructor
*Class will meet for 1 1/2 hours.	Np	*10	TT	Gym	Rader

P. E. M. 136. BADMINTON:-

*Classes will meet for 1 1/2 hours.	Lm	*8	TT	Gym	Kent
	Mn	*9	TT	Gym	Rader
	Np	*10	TT	Gym	L. H. Miller
**Students will be released early to participate in extra-curricular activities.	Pq	*11	TT	Gym	Strnad
	Qr	*12	TT	Gym	Mann
	Rs	**1	TT	Gym	Fordham

P. E. M. 139. BACKYARD SPORTS:-

*Classes will meet for 1 1/2 hours.	D	11	MWF	Gym	L. H. Miller
	G	***2	MWF	Gym	Thompson
	H	***3	MWF	Gym	Berrafato
**Students will be released early to participate in extra-curricular activities.	Qr	*12	TT	Gym	Versen
	Rs	**1	TT	Gym	Mann

***Adaptive only.

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

*Classes will meet for 1 1/2 hours.	Qr	*12	TT	Gym	Gedvilas
	Rs	**1	TT	Gym	Gedvilas

**Students will be released early to participate in extra-curricular activities.

P. E. M. 142. BALLROOM DANCE:-

P. E. M. 142. BALLROOM DANCE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	F	1	MWF	Auditorium	

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in Physical Education.

2 hours	D	11	WF		Fordham

P. E. M. 151. BEGINNING BASKETBALL:- For students majoring in Physical Education (first eight weeks).

2 hours	A	*8-10	MTWTF	Gym	Gedvilas

*Classes will meet for 1 1/2 hours.

P. E. M. 152. BEGINNING FOOTBALL:- For students majoring in Physical Education (second eight weeks).

2 hours	A	*8-10	MTWTF	Gym	Versen

*Classes will meet for 1 1/2 hours.

RECREATION 170. OUTDOOR RECREATIONAL SPORTS:- For students majoring in Physical Education. (second eight weeks).

2 hours	A	*8-10	MTWTF	Gym	Berrafato

*Class will meet for 1 1/2 hours.

RECREATION 171. INDOOR RECREATIONAL SPORTS:- For students majoring in Physical Education. (first eight weeks).

2 hours	A	*8-10	MTWTF	Gym	Berrafato

*Class will meet for 1 1/2 hours.

RECREATION 174. CAMP COUNSELING:- For students majoring in Physical Education.

3 hours	E	12	MWF		Mann

RECREATION 176. PRINCIPLES OF RECREATION:- For students majoring in Physical Education.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D	11	MWF		Berrafato

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

1 hour	E	12	MWF	Audit.	Wawrinecz
	F1	1	MWF	Audit.	Wawrinecz
*Classes meet for	F2	1	MWF	Audit.	Anzalone
1 1/2 hours.	*Mn	9	TT	Audit.	Wawrinecz
	*Np	10	TT	Audit.	Wawrinecz

P. E. W. 102. MODIFIED ACTIVITIES:- Open only to students assigned by Health Service.

1 hour	E	12	MWF	Audit.	Anzalone

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	B	9	MWF	Audit.	Staff
	C	10	MWF	Audit.	Staff
*Classes meet for	D	11	MWF	Audit.	Staff
1 1/2 hours.	*Np	10	TT	Audit.	Staff
	*Qr	12	TT	Audit.	Staff

P. E. W. 106. INTERMEDIATE RHYTHMS:- Prerequisite: P. E. W. 105 or consent of instructor.

1 hour	*Mn	9	TT	Audit.	Staff

*Class will meet for 1 1/2 hours.

P. E. W. 123. BASKETBALL:-

1 hour	***Rs	1	TT	Audit.	Anzalone

***Students will be released early to participate in extra-curricular activities. Class will meet for 1 1/2 hours.

P. E. W. 124. VOLLEYBALL:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	D	11	MWF	Audit.	Pesavento
	H	3	MWF	Audit.	Anzalone

P. E. W. 125. SOFTBALL:-

1 hour	*Tu	3	TT	Audit.	Wawrinecz

*Classes meet for 1 1/2 hours.

P. E. W. 130. BADMINTON:- Students to furnish own equipment.

1 hour	G	2	MWF	Audit.	Anzalone

P. E. W. 131. GOLF:- Students to furnish own equipment.

1 hour	*Pq	11	TT	Audit.	Pesavento

*Classes meet for 1 1/2 hours.

P. E. W. 132. BOWLING:-

1 hour	***Rs	1	TT	Abbott Hall	Wawrinecz

***Students will be released early to participate in extra-curricular activities. Classes meet for 1 1/2 hours.

P. E. W. 134. TENNIS-ARCHERY:- Students to furnish own equipment.

1 hour	*Qr	12	TT	Audit.	Anzalone

*Classes meet for 1 1/2 hours.

P. E. W. 142. BALLROOM DANCE:-

1 hour	G	2	MWF	Audit.	Wawrinecz

P. E. W. 152. BASKETBALL AND SOFTBALL:- Professional Course.

1 hour	C	10	MTWTF	Audit.	Pesavento

P. E. W. 154. TUMBLING-APPARATUS-TENNIS:- Professional Course.

Credit	Section	Hours	Days	Room	Instructor
2 hours	B	9	MTWTF	Audit.	Pesavento

P. E. W. 160. BEGINNING CONTEMPORARY DANCE:- Professional Course.

2 hours	F	1	MTWTF	Audit.	Staff

P. E. W. 236. FOLK DANCE:- Professional Course.

1 hour	E	12	MWF	Audit.	Barton

PHYSICAL SCIENCES

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and D. C. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. B	9	WF	204	Meloy
	Lab. 1	1-4	M	85	R. L. Miller
	Quiz 1	2	W	75	R. L. Miller
	Lab. 2	9-12	Tu	85	R. L. Miller
	Quiz 2	10	Th	80	R. L. Miller

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- A continuation of Phys. Sci. 101. Credit will not be given for both Phys. Sci. 101-102 and D. G. S. 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. M	9	TT	204	Meloy
	Lab. 11	1-4	W	85	Meloy
	Quiz 11	1	F	76	Meloy

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 12	10-1	Th	85	Cowin
	Quiz 12	10	Tu	80	Cowin
	Lab. 13	12-3	F	85	Cowin
	Quiz 13	1	W	76	Cowin

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Prerequisite: Trigonometry.

5 hours	Lec. X	11	Tu	127
	Quiz D1	11	MWF	134
	Lab. D	8-11	Th	117
	Quiz F1	1	MWF	134
	Lab. F	3-6	Tu	117
	Quiz H1	3	MWF	134
	Lab. H	3-6	Th	117

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. X	11	Th	127
	Quiz B1	9	MWF	134
	Lab. B	8-11	Tu	124
	Quiz C1	10	MWF	134
	Lab. C	8-11	Th	124
	Quiz G1	2	MWF	134
	Lab. G	3-6	Tu	124

Physics 106. GENERAL PHYSICS (MECHANICS):- Prerequisite: Credit or registration in Math. 133.

4 hours	Lec. X	9	M	127
	Lec. Y	11	M	127
	Lec. Z	2	M	127
	Quiz L1	8	TT	134
	Lab. L	8-11	W	123
	Quiz B1	9	WF	144

Physics 106. GENERAL PHYSICS (MECHANICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. B	8-11	Tu	123	
	Quiz M1	9	TT	134	
	Lab. M	8-11	F	123	
	Quiz C1	10	WF	144	
	Lab. C	8-11	Th	123	
	Quiz D1	11	WF	144	
	Lab. D	11-2	Th	123	
	Quiz P1	11	TT	134	
	Lab. P	12-3	W	123	
	Quiz Q1	12	TT	134	
	Lab. Q	12-3	F	123	
	Quiz F1	1	WF	144	
	Lab. F	11-2	Tu	123	
	Quiz R1	1	TT	134	
	Lab. R	3-6	M	123	
	Quiz G1	2	WF	144	
	Lab. G	3-6	Tu	123	
	Quiz H1	3	WF	144	
	Lab. H	3-6	Th	123	
	Quiz T1	3	TT	134	
	Lab. T	3-6	F	123	

Physics 107. GENERAL PHYSICS. (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- Prerequisite: Credit or registration in Math. 143; Physics 106.

Credit					
4 hours	Lec. X	11	W	127	
	Lec. Y	2	W	127	
	Quiz L1	8	TT	113	
	Lab. L	8-11	F	124	
	Quiz M1	9	TT	144	
	Lab. M	12-3	M	124	
	Quiz N1	10	TT	134	
	Lab. N	12-3	F	124	
	Quiz D1	11	MF	113	
	Lab. D	11-2	Tu	124	
	Quiz Q1	12	TT	144	
	Lab. Q	8-11	W	124	
	Quiz R1	1	TT	144	
	Lab. R	3-6	M	124	
	Quiz G1	2	MF	113	

Physics 107. GENERAL PHYSICS. (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. G	3-6	Th	124	
	Quiz H1	3	MW	113	
	Lab. H	3-6	F	124	

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- Prerequisite: Credit or registration in Math. 143; Physics 106.

4 hours	Lec. X	11	F	127	
	Lec. Y	1	F	127	
	Quiz L1	8	TT	110	
	Lab. L	8-11	W	122	
	Quiz M1	9	TT	113	
	Lab. M	8-11	M	122	
	Quiz P1	11	TT	113	
	Lab. P	11-2	M	122	
	Quiz Q1	12	TT	113	
	Lab. Q	12-3	W	122	
	Quiz R1	1	TT	113	
	Lab. R	3-6	M	122	
	Quiz G1	2	MW	110	
	Lab. G	3-6	Tu	122	

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus. Registration in Math. 345 or consent of instructor.

4 hours	Quiz G1	2	MWF	208	
	Lab. G	3-6	Th	208	

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	Q1	12	Tu	19	Gabis
		1	TT		

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- A survey course covering such topics as the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems and organizations involved in maintaining peace.

Credit	Section	Hours	Days	Room	Instructor
3 hours	D1	11	MWF	82	Israel

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development of national and state governments; the federal system; national and state constitutions; civil and political rights; party systems; nature, structure, powers, and procedure of legislative, executive and judicial departments in state and nation. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	38	Israel
	E1	12	MWF	28	Israel
	G1	2	MWF	28	Gabis
	H1	3	MWF	37	Gabis
	P1	11	TT	38	Gabis
		12	Tu		
	T1	3	TTF	82	Israel

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Pol. Sci. 150, or consent of department.

3 hours	Q1	12	TT	21	Israel
		1	Th		

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. (Lectures and quiz sections in this course are coordinate. The quiz section must be chosen from one of the group listed directly beneath the particular lecture hour selected). Prerequisite: Second semester freshman standing.

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. B1	9	WF	218	Howard
	Quiz D1	11	WF	13	
	Quiz M1	9	TT	19	Howard
	Quiz N1	10	TT	18	Allen
	Quiz Q1	12	TT	13	Allen
	Quiz R1	1	TT	201	Howard
	Lec. Q1	12	TT	218	Lipman
	Quiz F1	1	WF	13	
	Quiz H1	3	WF	14	
	Quiz J1	4	WF	28	
	Quiz R1	1	TT	17	Tyroler
	Quiz T1	3	TT	19	Tyroler

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:- Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Econ. 170 or Math. 161. Prerequisite: Psych. 100, 103, or 106.

3 hours	B1	9	MWF	28	Eells

Psych. 145. INDUSTRIAL PSYCHOLOGY:- A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Prerequisite: Psych. 100.

3 hours	A1	8	MWF	37	Howard
	P1	11	TT	24	Howard
			F	17	Howard

Psych. 150. PERSONALITY AND HUMAN RELATIONS:- An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Prerequisite: Psych. 100 or equivalent.

3 hours	Lec. C1	10	WF	218	Lipman
	Quiz B1	9	M	14	Kirtner
	Quiz C1	10	M	14	Kirtner
	Quiz N1	10	T	16	Lipman

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination.

Credit	Section	Hours	Days	Room	Instructor
No credit	A1	8	MWF	202	Kenny
	B1	9	MWF	202	Kenny
*Admission by consent	C1	10	MWF	202	Kenny
of Division of Humanities	D1	11	MWF	205	F. Johnson
	*D2	11	MTWTF	201	Kirstein-Hoskins
	E1	12	MWF	202	Kenny
	*E2	12	MTWTF	201	Kirstein-Hoskins
	F1	1	MWF	202	F. Johnson
	G1	2	MWF	202	Schiller
	H1	3	MWF	202	Schiller
	M1	9	MTT	201	S. Miller
	N1	10	MTT	203	Leonhard
	Q1	12	MTT	203	S. Miller
	R1	1	M	225	
			TT	209	McNamara

Rhet. 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

3 hours	A1	8	MWF	201	Hipple
	A2	8	MWF	203	Helmer
	B1	9	MWF	211	I. Miller
	B2	9	MWF	214	Kerwick
	B3	9	M	225	
			WF	201	Helmer
	C1	10	MWF	201	Hipple
	C2	10	M	225	
			WF	211	Helmer
	C3	10	MWF	212	I. Miller
	D1	11	MWF	211	Atwood
	D2	11	MWF	224	Karanikas

Rhet. 101. FRESHMAN REHTORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	D3	11	MWF	229	Hegie
	D4	11	M	215	
			WF	206	Cox
	E1	12	MWF	205	Hipple
	E2	12	MWF	206	Helmer
	E3	12	MWF	211	Kerwick
	F1	1	MWF	201	Hegie
	F2	1	MWF	203	Cox
	F3	1	M	223	
			WF	214	Blum
	G1	2	MWF	201	Hegie
	G2	2	MWF	203	Cox
	G3	2	MWF	227	Blum
	G4	2	MWF	206	Star
	G5	2	MWF	209	Kerwick
	H1	3	MWF	201	Atwood
	H2	3	MWF	203	Karanikas
	H3	3	MWF	205	Hegie
	H4	3	MWF	206	Cox
	H5	3	MWF	212	Rudin
	H6	3	MWF	214	Star
	J1	4	MWF	201	Star
	L1	8	MTT	205	Richey
	L2	8	MTT	223	Griest
	M1	9	M	206	
			TT	202	Richey
	N1	10	M	206	
			TT	202	Jackman
	N2	10	MTT	216	Griest
	P1	11	M	220	
			TT	202	J. Johnson
	Q1	12	MTT	212	Leonhard
	Q2	12	M	220	
			TT	202	Willett
	R1	1	MTT	206	J. Johnson
	R2	1	M	222	
			TT	211	Cassell
	T1	3	MTT	222	Reinsberg
	U1	4	MTT	202	J. Johnson
	U2	4	MTT	203	Reinsberg

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	222	Greenwald
	A2	8	MWF	219	Kogan
	B1	9	MWF	216	Freyer
	B2	9	MWF	222	Vest
	B3	9	MWF	229	Greenwald
	B4	9	M	228	Timmis
			WF	219	
	C1	10	MWF	229	Freyer
	C2	10	M	221	
			WF	203	Jordan
	C3	10	M	226	
			WF	214	Carlson
	C4	10	M	227	
			WF	216	Timmis
	D1	11	M	221	
			WF	209	Crawley
	D2	11	M	223	
			WF	212	Gallagher
	D3	11	M	226	
			WF	217	Stronks
	E1	12	M	223	
			WF	203	Mackin
	E2	12	MWF	224	I. Miller
	E3	12	MWF	229	Wright
	E4	12	M	222	Star
			WF	217	
	E5	12	M	221	
			WF	212	Greenwald
	F1	1	MWF	209	Crawley
	F2	1	MWF	227	Stronks
	F3	1	MWF	229	Carlson
	F4	1	MWF	96	Timmis
	F5	1	M	212	
			WF	206	Jordan
	G1	2	MWF	214	Crawley
	G2	2	MWF	220	Gallagher
	G3	2	MWF	221	Mackin

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	G4	2	MWF	223	Carlson
	G5	2	MWF	224	Waller
	G6	2	MWF	226	Timmis
	G7	2	MWF	222	Rudin
	H1	3	MWF	219	Gallagher
	H2	3	MWF	224	Mackin
	H3	3	MWF	229	Carlson
	H4	3	MWF	96	Waller
	J1	4	MWF	205	Waller
	L1	8	MTT	206	Willett
	L2	8	MTT	211	S. Miller
	L3	8	MTT	214	Nicholas
	M1	9	M	220	
			TT	203	Griest
	M2	9	M	221	
			TT	209	Nicholas
	M3	9	M	223	
			TT	211	McNamara
	N1	10	M	222	
			TT	205	Willett
	N2	10	M	223	
			TT	209	Kirstein
	N3	10	M	224	
			TT	212	McNamara
	P1	11	M	227	
			TT	203	Cassell
	P2	11	MTT	206	Love
	Q1	12	M	225	
			TT	211	Nicholas
	Q2	12	M	227	
			TT	215	Kogan
	Q3	12	M	226	
			TT	214	McNamara
	R1	1	M	221	
			TT	202	Runyan
	R2	1	M	228	
			TT	203	Love
	T1	3	M	221	
			TT	202	Love
	T2	3	M	223	
			TT	203	Runyan

Rhet. 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	U1	4	MTT	206	Cassell
	U2	4	MTT	209	Runyan

Rhet. 144. NARRATIVE WRITING:- Practice in description, narrative sketches, stories. Prerequisite: Rhetoric 101 and 102; sophomore standing.

3 hours	E1	12	M	228	
			WF	209	Freyer

Rhet. 151. BUSINESS LETTER WRITING:- Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

3 hours	B1	9	M	224	
			WF	205	Oleksy
	C1	10	MWF	205	Oleksy
	F1	1	MWF	205	Oleksy
	G1	2	MWF	205	Oleksy
	P1	11	M	97	
			TT	205	Reinsberg
	R1	1	M	224	
			TT	205	Reinsberg

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit, is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. G1	2	WF	218	Endleman
	Quiz H1	3	WF	97	Endleman
[1]Students with 95 or more credit hours receive only 3 hours credit.	Quiz L1	8	TT	97	Corley
	Quiz N1	10	TT	24	Corley
	Quiz R1	1	TT	20	Corley
	Quiz T1	3	TT	18	Endleman

Soc. Sci. 112. BASES OF CONTEMPORARY AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, social, and intellectual developments of the United States and to equip him for intelligent active participation in local and national affairs. Credit is not given for this course to a student with credit, or concurrent registration, in Pol. Sci. 150 or 151, or History 151 or 152.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. E1	12	M	218	Bill
	Quiz C1	10	MWF	82	Bill
[1]Students with 95	Quiz F1	1	MWF	82	Bill
or more credit hours	Quiz Q1	12	TT	82	Riddle
receive only 3 hours		1	Th	82	Riddle
credit.					

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation.

4 hours[1]	Lec. B1	9	M	218	Colby
	Quiz M1	9	TTF	14	Colby
	Quiz Q1	12	MTT	14	Colby
	Quiz R1	1	MTT	14	Cutshall

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. D1	11	WF	218	Klassen-Staff
	Quiz C1	10	MW	97	Klassen
	Quiz P1	11	TT	18	Lipman

SOCIOLOGY

Sociol. 100. INTRODUCTION TO SOCIOLOGY:- Introductory analysis and description of the structure of dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social stratification, and institutions. Prerequisite: Sophomore standing.

Sociol. 100. INTRODUCTION TO SOCIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	97	Corley
	D1	11	MWF	37	Corley
	P1	11	TT	229	
		12	Tu	229	
	R1	12	Th	229	
		1	TT	229	

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of persons and relations to institutions, social order, and development. Prerequisite: Sociol. 100.

3 hours	B1	9	MWF	37	Corley

Sociol. 140. SOCIAL CONTROL:- The methods and techniques of group social control of individuals in small groups, societies, and large publics. The innovations in methods of social control resulting from the development of the new mass media of communication. Prerequisite: Sociol. 100, or 104 and 105, or D.G.S. 151.

3 hours	F1	1	MWF	37	Klassen

ANTHROPOLOGY

Anthrop. 103. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology.

3 hours	Q1	12	Tu	24	Endleman
		1	TT	24	Endleman
	U1	4	TTF	97	Endleman

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

Credit	Section	Hours	Days	Room	Instructor
4 hours	A1	8	TWTF	227	Tort
	B1	9	TWTF	227	Tort
	C1	10	TWTF	225	Marsh
	J1	4	TWTF	227	Flys

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

4 hours	B1	9	TWTF	225	Marsh
	D1	11	TWTF	227	Patlogan
	F1	1	TWTF	225	Marsh

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

4 hours	C1	10	TWTF	227	Tort
	H1	3	TWTF	227	Flys

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

4 hours	E1	12	TWTF	227	Tort
	H1	3	TWTF	225	Patlogan

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

2 hours	G1	2	WF	225	Patlogan

Spanish 202. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

3 hours	D1	11	MWF	225	Marsh

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

Credit	Section	Hours	Days	Room	Instructor
No credit					
Feb. 19 - April 4	N1	10	TT	201	Hoskins
April 9 - May 28	N2	10	TT	201	Hoskins
Feb. 19 - April 4	D1	11	MW	202	Hoskins
April 9 - May 28	D2	11	MW	202	Hoskins

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

3 hours	A1	8	MWF	217	Hoskins
	B1	9	MWF	217	Hovde
	C1	10	MWF	217	Hovde
	C2	10	MWF	219	Wright
	D1	11	MWF	219	Hovde
	E1	12	MWF	219	Evans
	F1	1	MWF	219	Crews
	F2	1	MWF	217	Hovde
	G1	2	MWF	219	Crews
	G2	2	MWF	217	Pitt
	H1	3	MWF	217	Pitt
	J1	4	MWF	217	Pitt
	M1	9	MTT	219	Evans
	N1	10	M	220	
			TT	219	Pitt
	P1	11	MTT	217	Thompson
	Q1	12	MTT	217	Thompson
	R1	1	M	220	
			TT	217	Evans
	T1	3	M	220	
			TT	217	Goulson
	U1	4	MTT	219	Crews

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice. Students with 95 or more credit hours receive only 1 hour credit.

Credit	Section	Hours	Days	Room	Instructor
2 hours	B1	9	MWF	203	Hoskins
	D1	11	MWF	203	Rigler

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	N1	10	TT	217	W. N. Thompson

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	Q1	12	TT	28	Hovde

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	E1	12	MWF	214	Pitt

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretation, analysis, and oral reading of prose literature and verse. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	P1	11	TT	219	Goulson
	R1	1	TT	219	Crews
	T1	3	TT	219	Crews

Speech 161. FUNDAMENTALS OF ACTING:- A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Speech 141.

3 hours	R1	1	M	226	
			TT	216	Goulson

Speech 164. RADIO SPEAKING:- Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. Prerequisite: Consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
2 hours	P1	11-1	TT	451	Evans

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 143.

2 hours	C1	10	MF	110

T. A. M. 151. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 143.

3 hours	F1	1	MWF	110

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

4 hours	C1	10	MWTF	113
	J1	4	MTWF	113

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

5 hours	E1	12	MTWTF	110
	J1	4	MTWTF	134

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 123. For architecture students ONLY.

3 hours	H1	3	MWF	110

T. A. M. 172. STRENGTH OF MATERIALS:- Prerequisite: T. A. M. 171. For architecture students only.

3 hours	J1	4	MWF	110

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T. A. M. 150.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	110	
	D1	11	MWF	110	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T. A. M. 150, 154 or 156.

3 hours	T1	3	MTT	144
	E1	12	MWF	113

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T. A. M. 221.

1 hour	A	8-10	Tu	61
	B	10-12	F	61
	C	12-2	Th	61
	D	2-4	M	61

IDEN. NUMBER_____

Date_____

Name in full_____ College_____
[Print] [Last name first; then given names]

Curriculum_____

Address_____
(While attending the University; INCLUDE POSTAL ZONE)

Telephone_____ Examiner and Recorder's Stamp Here

Subject (i. e., Department)	Course No.	Credit Hours	Sec.	M	T	W	T	F	Signatures of Dept. Clerks

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TIME TABLE

FIRST SEMESTER, 1957-1958

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
NAVY PIER

THE LIBRARY OF THE
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UNIVERSITY OF ILLINOIS

TABLE OF CONTENTS

Pre-Registration Advisement Schedule 3
Calendar, First Semester, 1957-58 4
First Semester, Registration Schedule 5
Legend for Section Letters 6
Schedule of Tuition and Fees 6
Chicago Undergraduate Division Calendar, 1957-58 7
Urbana, Calendar, 1957-58 8
Instruction for Registration 9-11
Accountancy 12, 13
Anthropology 68
Architecture 13, 14
Art 14, 15
Biological Sciences 15-18
Business Law 18
Chemistry 18-24
Civil Engineering 24, 25
Economics 25-27
Education 27
Electrical Engineering 27, 28
English 28-30
French 30, 31
General Engineering 31, 32
Geography 33, 34
Geology 34, 35
German 35, 36
History 36-38
Humanities 38
Hygiene 38, 39
Management 39
Marketing 40
Mathematics 40-44
Mechanical Engineering 44, 45
Military Sciences and Tactics 45, 46
Music 46, 47
Philosophy 47, 48
Physical Education for Men 48-53
Physical Education for Women 53-55
Physical Sciences 55, 56
Physics 56-58
Political Science 58, 59
Psychology 59, 60
Rhetoric 60-66
Social Sciences 66, 67
Sociology 67, 68
Spanish 68, 69
Speech 69-71
Theoretical and Applied Mechanics 71-73

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PRE-REGISTRATION ADVISEMENT SCHEDULE
First Semester, 1957-58

PLACE: Men's Gymnasium

COMMERCE
ENGINEERING

FORMER STUDENTS ONLY

A	-	E	Monday, September 9	1:00 - 4:00 p. m.
F	-	K	Tuesday, September 10	9:00 - 12:00 noon
L	-	Q	Tuesday, September 10	1:00 - 4:00 p. m.
R	-	Z	Wednesday, September 11	9:00 - 12:00 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS ONLY

A	-	BRZ	Monday, September 9	1:00 p. m.
BS	-	DON	Monday, September 9	2:00 p. m.
DOO	-	GRAM	Monday, September 9	3:00 p. m.
GRAN	-	JOH	Tuesday, September 10	9:00 a. m.
JOI	-	MAC	Tuesday, September 10	10:00 a. m.
MAD	-	NOR	Tuesday, September 10	11:00 a. m.
NOS	-	ROC	Tuesday, September 10	1:00 p. m.
ROD	-	SUL	Tuesday, September 10	2:00 p. m.
SUM	-	Z	Tuesday, September 10	3:00 p. m.

NEW STUDENTS

A	-	COK	Wednesday, September 11	9:00 a. m.
COL	-	GN	Wednesday, September 11	10:00 a. m.
GO	-	KLE	Wednesday, September 11	11:00 a. m.
KLF	-	NEK	Wednesday, September 11	1:00 p. m.
NEL	-	SMH	Wednesday, September 11	2:00 p. m.
SMI	-	Z	Wednesday, September 11	3:00 p. m.

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

CALENDAR

First Semester, Fall, 1957

Wed., Sept. 4 - Wed., Sept. 11	Orientation Period
Thurs., Sept. 12 - Fri., Sept. 13	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, September 13, for registration)
Mon., Sept. 16	Instruction Begins
Thurs., Sept. 19, 1:00 p.m.	Earliest time at which program changes may be made
Fri., Sept. 27, 4:00 p.m.	Latest date of withdrawal for rebate in full
Fri., Nov. 1, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals
Fri., Nov. 8, 12:00 noon	Mid-semester grades are due
Fri., Nov. 8, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees
Fri., Nov. 22	Last date for veterans who are first semester freshman to apply to the Student Counseling Services, Room 300, to take the General Educational Development Tests, College level. The tests will be given on Friday, November 29, from 9:30 a.m. to 5:00 p.m.
Wed., Nov. 27, 6:00 p.m.	Thanksgiving vacation begins
Mon., Dec. 2, 8:00 a.m.	Thanksgiving vacation ends
Tues., Dec. 3	Illinois Day (State admitted to Union, 1818)
Wed., Dec. 4, 4:00 p.m.	Students withdrawing on or after this date must petition for readmission
Fri., Dec. 6, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals
Tues., Dec. 17, 6:00 p.m.	Christmas vacation begins
Thurs., Jan. 2, 8:00 a.m.	Christmas vacation ends
Fri., Jan. 17 - Sat., Jan. 25	Semester Examinations

FIRST SEMESTER REGISTRATION SCHEDULE

Your records will be given to you in the Navy Pier Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, September 13, 1957, will be assessed a late registration fee of $5.00.

A	-	C	Thursday, September 12	8:30 a.m.
D	-	H	Thursday, September 12	11:30 a.m.
I	-	N	Thursday, September 12	1:30 p.m.
O	-	R	Thursday, September 12	9:30 a.m.
S	-	Z	Thursday, September 12	10:30 a.m.

NEW STUDENTS

A	-	B	Friday, September 13	8:30 a.m.
C	-	D	Thursday, September 12	2:30 p.m.
E	-	G	Friday, September 13	9:30 a.m.
H	-	K	Thursday, September 12	3:30 p.m.
L	-	Mil	Friday, September 13	2:30 p.m.
Mim	-	P	Friday, September 13	1:30 p.m.
Q	-	So	Friday, September 13	11:30 a.m.
Sp	-	Z	Friday, September 13	10:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m., Friday, September 13.

All University offices will be closed on Saturday, September 14, 1957.

Late registration will begin on Monday, September 16, 1957.

Instruction will begin on Monday, September 16, 1957.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more ..... $ 75.00
(Eight hours or less pay tuition of $5 a semester hour)

Non-residents of Illinois taking nine hours or more $250.00
(Eight hours or less pay tuition at rate of $20 a semester hour)

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours ..... $ 7.00
(Less than 5 hours, optional)

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours ..... $ 11.00
(Less than nine hours, $5.50 each semester)

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours ..... $ 6.00
(Students taking five hours or less pay no student activity fee)

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the second semester 1956-57 or the summer session, 1957, must pay a General Deposit of ..... $ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who pays his tuition and fees after 5:00 p.m., Friday, September 13, in the amount of ..... $ 5.00

LEGEND FOR SECTION LETTERS*

Hour	5, 4, and 3 hour courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR, 1957-58

First Semester, Fall, 1957

Wed., Sept. 4 - Wed., Sept. 11	Orientation Period
Thurs., Sept. 12 - Fri., Sept. 13	Registration
Mon., Sept. 16	Instruction Begins
Wed., Nov. 27, 6 p.m.	Thanksgiving Vacation Begins
Mon., Dec. 2, 8 a.m.	Thanksgiving Vacation Ends
Tues., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Tues., Dec. 17, 6 p.m.	Christmas Vacation Begins
Thurs., Jan. 2, 8 a.m.	Christmas Vacation Ends
Fri., Jan. 17 - Sat., Jan. 25	Semester Examinations

Second Semester, Spring, 1958

Sat., Feb. 1 - Wed., Feb. 5	Orientation Period
Thurs., Feb. 6 - Fri., Feb. 7	Registration
Mon., Feb. 10	Instruction Begins
Sun., Mar. 2	University Day (University opened, 1868)
Thurs., Apr. 3, 6 p.m.	Easter Vacation Begins
Wed., Apr. 9, 8 a.m.	Easter Vacation Ends
Fri., May 9	Honors Day
Fri., May 30	Memorial Day (Holiday)
Thurs., May 29 - Sat., June 7	Semester Examinations

Summer Session, 1958

Fri., June 20	Registration
Mon., June 23	Instruction Begins
Fri., July 4	Independence Day (Holiday)
Fri., Aug. 15 - Sat., Aug. 16	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR, 1957-58

First Semester, Fall, 1957

Tues., Sept. 3 - Fri., Sept. 6	Entrance Examinations
Mon., Sept. 9 - Sat., Sept. 14	Freshman Week and Registration
Mon., Sept. 16	Instruction Begins
Wed., Nov. 27, 1 p.m.	Thanksgiving Vacation Begins
Mon., Dec. 2, 1 p.m.	Thanksgiving Vacation Ends
Tues., Dec. 3	Illinois Day (State admitted to the Union, 1818)
Fri., Dec. 20, 1 p.m.	Christmas Vacation Begins
Thurs., Jan. 2, 1 p.m.	Christmas Vacation Ends
Thurs., Jan. 16	Study Day, Classes Dismissed
Fri., Jan. 17 - Sat., Jan. 25	Semester Examinations

Second Semester, Spring, 1958

Tues., Jan. 28 - Fri., Jan. 31	Entrance Examinations
Mon., Feb. 3 - Wed., Feb. 5	Registration
Thurs., Feb. 6	Instruction Begins
Sun., Mar. 2	University Day (University opened, 1868)
Thurs., Apr. 3, 1 p.m.	Easter Vacation Begins
Tues., Apr. 8, 1 p.m.	Easter Vacation Ends
Fri., May 2	Honors Day, Classes Dismissed at Noon
Fri., May 30	Memorial Day (Holiday)
Tues., May 27	Study Day, Classes Dismissed
Wed., May 28 - Fri., June 6	Semester Examinations
Sat., June 14	Commencement Exercises

Summer Session, 1958

Tues., June 3 - Fri., June 6	Entrance Examinations
Mon., June 16	Registration
Tues., June 17	Instruction Begins
Fri., July 4	Independence Day (Holiday)
Fri., Aug. 8 - Sat., Aug. 9	Summer Session Examinations

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND, OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

AUTHORIZATION CARD, No. 1

2. Refer to your No. 1 Authorization Card for your identification number (I. D. Number), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students. SPECIAL NOTE: All your IBM cards must be identified by your I. D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's Copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

DEAN'S PROGRAM CARD, No. 2

4. Print your I. D. number (but not your name) semester hours earned, local address, and telephone number on the front of the No. 2 Dean's Program Card. Then copy your program showing lecture, laboratory and quiz on separate lines on the front of this card and secure your adviser's signature. Courses must be listed by department and course number (e.g., English 101) and not by the descriptive title (e.g., Introduction to Poetry). Turn card over and fill out the back of the No. 2 Dean's Program Card in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program Card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course as separate lecture and/or

laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH NO. 5 CLASS CARD issued to you in box provided (further indicated by arrows) but do not write your name on these cards.

RECORDER'S INFORMATION CARD, No. 3

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and LEFT margin of this card. PRINT PLAINLY.

VETERAN'S CARD, NO. 4

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked Be sure your program on your Student's Copy of Registration form agrees with program on the No. 2 Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on your Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2, and then proceed to Station No. 3 for class card check.

11. All veterans stop at Station 4.

FEE CARD NO. 6 and IDENTIFICATION CARD NO. 7

12. Submit all cards to the Recorder's fee card clerks at Station 5 and obtain a No. 6 Fee Assessment Card and a No. 7 Fee Receipt Card. Write your name and address on the No. 7 Identification Card.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 5, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to the clerks at Station 7. Your cards should be presented in the following

sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in R. O. T. C., report to Station 8.

16. Present your No. 6, 7, and 4 cards to clerks at Station 9.

17. Present cards No. 6, 7, and 4, if applicable, to one of the cashiers and pay your fees. Do not present cards No. 1, 2, 3, and 5 to cashiers. The No. 7 Fee Receipt Card and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

18. Submit all cards to the clerks at Station 12 in the following sequence: No. 7, 1, 2, 3, all No. 5 cards, and No. 4, if applicable. The clerks at this station will return only the No. 7 card to you.

19. Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	B1	9	MWF	18	Lipkin
	C1	10	MWF	22	Kabbes
	D1	11	MWF	17	Hedish
[1]Students with 95	E1	12	MWF	19	Lindhe
or more credit hours	F1	1	MWF	21	Schneider
receive only 2 hours	G1	2	MWF	19	Lipkin
credit.	G2	2	MWF	23	Andrews
	G3	2	MWF	38	Fox
	H1	3	MWF	38	Fox
	J1	4	MWF	38	Andrews
	J2	4	MWF	16	Morici
	M1	9	MTT	20	Schneider
	N1	10	MTT	20	Schneider
	P1	11	MTT	16	Morici
	Q1	12	MTT	23	Kabbes
	R1	1	MTT	23	Kabbes
	R2	1	MTT	19	Lindhe
	T1	3	MTT	16	Morici
	T2	3	TT	24	Hedish
			F	23	Hedish
	U1	4	MTT	17	Hedish

Accy. 105. ACCOUNTING PROCEDURE:- Continuation of Accy. 101. Prerequisite: Accy. 101.

3 hours[1]	C1	10	MWF	19	Andrews
	D1	11	MWF	19	Andrews
	E1	12	MWF	17	Hedish
[1]Students with 95	F1	1	MWF	24	Morici
or more credit hours	M1	9	MTT	23	Malinosky
receive only 2 hours	P1	11	MTT	22	Malinosky
credit.					

Accy. 106. ELEMENTARY COST ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	C1	10	MWF	18	Lipkin

Accy. 106. ELEMENTARY COST ACCOUNTING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	E1	12	MWF	21	Lipkin
	F1	1	MWF	18	Malinosky
	G1	2	MWF	18	Malinosky
	H1	3	MWF	19	Lindhe
	U1	4	MTT	19	Lindhe

Accy. 108. INTERMEDIATE ACCOUNTING:- Prerequisite: One year of Accountancy; sophomore standing.

3 hours	B1	9	MWF	22	Kabbes
	G1	2	MWF	21	Schneider

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture; exercises illustrating basic architectural forms and their organization.

3 hours	Lec.	12	W	251
	Lab. B6	3-5	MTTF	241
	Lab. B7	8-10	MTTF	241
	Lab. D7	12-2	MTTF	241
	Lab. X	10-12	MTTF	241

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. Prerequisite: Arch. 131 or sophomore standing.

2 hours	Lec. D	10	TT	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Arch. 101 and registration in G. E. 108.

3 hours	Lec.	10	W	251
	Lab. A	8-10	MTTF	241
	Lab. B	10-12	MTTF	241
	Lab. C	12-2	MTTF	241
	Lab. D	4-6	MTTF	241

Arch. 132. ARCHITECTURAL DESIGN:- Continuation of the fundamentals of architectural design. Prerequisite: Arch. 131 or consent of instructor.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec.	1	W	251	
	Lab. A	11-2	MF	242	
		11-1	W	242	
	Lab. B	11-2	TT	242	
		2-4	W	242	

Arch. 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Arch. 132.

3 hours	Lab. A	8-11	MWF	242
	Lab. B	2-5	MWF	242

Arch. 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Study of materials and assemblies of materials employed in the construction of buildings classified by Building Codes as Type IV, including single family residences and simple business structures with basements, crawl spaces, or basementless foundations. Prerequisite: Credit or registration in Arch. 131.

2 hours	Lec. E	3	MF	251

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:- Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Prerequisite: Arch. 141.

2 hours	Lec. C	10	MF	251

ART

Art 111. SURVEY OF ART HISTORY:- Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

3 hours	Lec. G1	2	MWF	251

Art 115. ART APPRECIATION:- Primarily for non-art students.

3 hours	Lec. B1	9	MWF	251

Art 181. FREEHAND DRAWING:- Primarily for students in Architecture.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lab. A6	8-11	TT	83	
	Lab. B6	8-10	MWF	83	
	Lab. C6	11-2	TT	83	
	Lab. D6	12-2	MWF	83	
	Lab. E6	2-4	MWF	83	
	Lab. F6	10-12	MWF	83	
	Lab. F7	8-10	MWF	84	
	Lab. G6	3-6	TT	83	
	Lab. H6	4-6	MWF	83	

Art 182. FREEHAND DRAWING:- Primarily for students in Architecture. Prerequisite: Art 181.

2 hours	Lab. B7	11-2	TT	84
	Lab. D7	3-6	TT	84

Art 183. FREEHAND DRAWING:- Primarily for students in Architecture. Prerequisite: Art 182.

2 hours	Lab. A	1-3	MWF	91
	Lab. B	8-10	MWF	91
	Lab. C	3-6	TT	91
	Lab. D	8-11	TT	91

Art 184. FREEHAND DRAWING:- Primarily for students in Architecture. Prerequisite: Art 183.

2 hours	Lab. A	11-2	TT	91
	Lab. B	3-6	MF	91

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:- This course is designed to give a fundamental understanding of plant and animal life and their reproduction. Lectures and laboratory. Credit will not be given for both Biology 101 and D. G. S. 131. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed beneath the particular lecture selected).

Biology 101. FUNDAMENTALS OF BIOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. B1	9	WF	210	Glassman
	Lab. 1	8-10	TT	46	
	Lab. 2	10-12	TT	46	
[1]Students with 95	Lab. 3	12-2	TT	44	
or more credit hours	Lab. 4	3-5	TT	46	Chapp
receive only 3 hours	Lab. 5	10-12	WF	44	Glassman
credit.	Lab 6	10-12	M	48	
			F	46	
	Lab. 7	12-2	MW	46	
	Lec. D1	11	WF	210	Presley
	Lab. 8	8-10	MW	46	Madison
	Lab. 9	12-2	WF	48	Presley
	Lab. 10	8-10	TT	48	Presley
	Lab. 11	4-6	WF	48	
	Lab. 12	12-2	TT	48	Sangster
	Lab. 13	10-12	TT	48	Scudder
	Lab. 14	8-10	WF	48	Presley
	Lec. P1	11	TT	218	Pickett
	Lab. 15	4-6	MW	46	
	Lab. 16	12-2	TT	46	Pickett
	Lab. 17	8-10	M	48	Scudder
			F	46	
	Lab. 18	2-4	MW	46	
	Lab. 19	12-2	M	48	Scudder
			F	46	
	Lab. 20	3-5	TT	48	Pickett
	Lec. R1	1	TT	218	Little
	Lab. 21	8-10	TT	44	Shomay
	Lab. 22	2-4	M	48	Scudder
			F	46	
	Lab. 23	10-12	MW	46	
	Lab. 24	12-2	WF	44	
	Lab. 25	2-4	WF	44	W. J. Dembski
	Lab. 26	3-5	TT	44	Little
	Lab. 27	4-6	WF	44	

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:- Application of biological principles to the living world. Lectures and laboratory. Prerequisite: Biology 101. Credit will not be given for both Biology 102 and D. G. S. 132. (Lecture and laobratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. E1	12	WF	210	Chapp-Glassman
	Lab. 1	3-5	TT	43	W. J. Dembski
	Lab. 2	10-12	TT	43	Glassman
	Lab. 3	12-2	TT	43	Chapp
	Lec. Q1	12	TT	210	Madison-Rouffa
	Lab. 4	10-12	WF	43	Chapp
	Lab. 5	12-2	WF	43	W. J. Dembski
	Lab. 6	2-4	WF	43	Chapp

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 111. GENERAL BOTANY:- A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures and laboratory. Prerequisite: Placement or consent of instructor.

4 hours[1]	Lec. N1	10	TT	210	Rouffa
	Lab. 1	10-12	WF	48	Rouffa
	Lab. 2	2-4	WF	48	Rouffa

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 121. MICROBIOLOGY:- A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of the organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 102 or consent of instructor.

4 hours[1]	Lec. R1	1	TT	213	Madison
	Lab. 1	8-10	TT	43	Madison

[1] Students with 95 or more credit hours receive only 3 hours credit.

Biology 131. GENERAL ZOOLOGY:- A survey of the animal kingdom, the phylogenetic relationships of the animals and classification. Emphasis is placed upon economically important and parasitic forms. Prerequisite: Biology 111.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. C1	10	WF	210	Shomay
	Lab. 1	8-10	WF	44	Shomay
	Lab. 2	10-12	TT	44	Shomay

[1]Students with 95 or more credit hours receive only 3 hours credit.

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:- Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures and laboratory. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B".

5 hours	Lec. G1	2	MWF	210	Shank
	Lab. 1	8-10	MWF	45	Spirakis
	Lab. 2	10-12	MWF	45	Spirakis
	Lab. 3	8-11	TT	45	Spirakis
	Lab. 4	11-2	TT	45	Shank

Biology 333. VERTEBRATE EMBRYOLOGY:- The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 101 and 132; junior standing.

5 hours	Lec. F1	1	MWF	213	Sangster
	Lab. 1	2-4	MWF	45	Sangster

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Credit toward graduation will not be given for Bus. Law 201 or 261 in addition to Bus. Law 100. See Bus. Law 202 for provisional reduced credit. Prerequisite: Accy. 105; Econ. 102; forty-five credit hours.

3 hours	C1	10	MWF	24	Fox
	E1	12	MWF	38	Fox

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:- For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Prerequisite: One unit of entrance credit in physics, or 2 1/2 units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	Lec. N	10	TT	204	Hunt
	Lab. 1	8-10	MWF	53	R. E. Johnson
	Quiz 1	8	TT	74	R. E. Johnson
[1]Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chem. 101. Students with 95 or more credit hours receive only 3 hours credit.	Lab. 2	10-12	MWF	53	
	Quiz 2	11	TT	74	
	Lab. 3	12-2	MWF	53	R. E. Johnson
	Quiz 3	12	TT	74	R. E. Johnson
	Lab. 4	2-4	MWF	53	
	Quiz 4	3	TT	74	
	Lab. 5	9-11	MWF	53	Farag
	Quiz 5	9	TT	74	Farag
	Lab. 6	1-3	MWF	53	R. L. Miller-Sackheim
	Quiz 6	1	TT	74	R. L. Miller
NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING.	Lab. 8	3-6	TT	53	Potempa
	Quiz 8	3	MW	74	Potempa

Chem. 102. GENERAL CHEMISTRY:- For students who have one year of high school chemistry. Prerequisite: One unit of entrance credit in chemistry or equivalent.

3 hours[1]	*Lec. C	10	WF	204	Mueller
	Lab. 9	8-10	M	53	
	Quiz 9	8	TT	76	
[1]Students with 95 or more credit hours receive only 2 hours credit.	Lab. 10	10-12	M	53	Seabright
	Quiz 10	10	TT	76	Seabright
	Lab. 11	12-3	F	53	Mueller
	Quiz 11	12	TT	76	Mueller
	Lab. 12	2-4	M	53	Mueller
*NOT OPEN TO STUDENTS IN THE COLLEGE OF ENGINEERING.	Quiz 12	2	WF	75	Mueller
	Lab. 13	9-11	Tu	53	Mueller
	Quiz 13	10	MTh	80	Mueller
	Lab. 14	11-1	Th	53	Lothian
	Quiz 14	11	MW	75	Lothian

Chem. 102. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
**FOR STUDENTS IN THE COLLEGE OF ENGINEERING.	**Lec. M	9	TT	210	Schrage
	Lab. 15	8-10	F	50	
	Quiz 15	8	TT	80	
	Lab. 16	10-12	F	53	Schrage
	Quiz 16	9	WF	76	Schrage
	Lab. 17	12-2	Tu	53	Carbonaro
	Quiz 17	12	MW	74	Carbonaro
	Lab. 18	2-4	F	53	Schrage
	Quiz 18	2	MW	80	Schrage
	Lab. 19	10-12	Tu	53	Carbonaro
	Quiz 19	10	MW	74	Carbonaro
	Lab. 20	10-12	Th	53	
	Quiz 20	10	WF	76	
	Lab. 21	3-5	Tu	53	Heller
	Quiz 21	3	WF	75	Heller
	Lab. 22	3-5	Th	53	Savoy
	Quiz 22	5	MW	75	Savoy

Chem. 103. GENERAL CHEMISTRY:- Lectures, recitations, and laboratory. For engineering students who have had no chemistry. Prerequisite: One unit of entrance credit in physics, or 2 1/2 units of entrance credit in Mathematics 111 or 112.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. D	11	WF	204	Bachrach
	Lab. 23	8-10	WF	50	Bachrach
	Quiz 23	9	TT	76	Bachrach
	Lab. 24	12-2	WF	50	
	Quiz 24	11	TT	75	
	Lab. 25	1-3	MW	50	Farag-Seabright
	Quiz 25	11	TT	76	Farag
	Lab. 26	3-5	MW	50	Hart
	Quiz 26	5	MW	74	Hart
	Lab. 27	9-11	TT	50	Heller
	Quiz 27	9	M	76	
		9	F	80	Heller
	Lab. 28	11-1	TT	50	Cowin
	Quiz 28	12	WF	75	Cowin
	Lec. P	11	TT	204	Bachrach
	Lab. 29	9-11	MW	50	Sackheim
	Quiz 29	11	WF	80	Sackheim

[1]Students who have used their high school chemistry for entrance credit are given only 3 hours credit for Chem. 103. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 103. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 30	11-1	WF	50	
	Quiz 30	12	TT	80	
	Lab. 31	12-2	TT	50	Sackheim
	Quiz 31	1	WF	74	Sackheim
	Lab. 32	9-11	TT	50	R. E. Johnson
	Quiz 32	1	WF	76	Bachrach
	Lab. 33	3-5	TT	50	Farag
	Quiz 33	12	WF	76	Farag
	Lab. 34	8-10	TT	50	Sackheim
	Quiz 34	8	MW	75	Sackheim
	Lec. T	3	TT	204	
	Lab. 35	10-12	TT	50	
	Quiz 35	3	MW	80	
	Lab. 36	2-4	MW	50	Dafler
	Quiz 36	4	TT	76	Dafler
	Lab. 37	10-12	WF	50	
	Quiz 37	10	TT	75	
	Lab. 38	12-2	WF	50	Seabright
	Quiz 38	1	TT	80	Seabright
	Lab. 39	4-6	TT	50	
	Quiz 39	3	M	75	
		3	F	80	
	Lab. 40	9-11	WF	50	Polli
	Quiz 40	8	WF	76	Polli

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:- Lectures, recitations, and laboratory. Limited to students in the engineering curricula. Prerequisite: Chemistry 101, 102, or 103.

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. P	11	TT	210	Huitema
	Lab. 41	8-10	WF	50	
	Quiz 41	11	MW	76	
	Lab. 42	10-12	WF	50	C. J. Perry
	Quiz 42	9	WF	74	C. J. Perry
	Lab. 43	12-2	WF	50	Huitema
	Quiz 43	1	TT	76	Huitema
	Lab. 44	2-4	WF	50	
	Quiz 44	11	M	74	
		11	F	75	

[1] Credit in Chem. 104 will not be granted to students who have received credit in Chem. 105 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 104. CHEMISTRY OF THE MATALLIC ELEMENTS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 45	8-10	TT	50	C. J. Perry
	Quiz 45	8	WF	74	C. J. Perry
	Lab. 46	12-2	TT	50	C. J. Perry
	Quiz 46	1	WF	75	C. J. Perry

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:- Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 and 106. Prerequisite: Chemistry 101, 102, or 103.

5 hours[1]	Lec. R	1	TT	210	Hunt
	Lab. 51	8-10	MWF	53	Lothian
	Quiz 51	8	TT	75	Lothian
	Lab. 52	10-12	MWF	53	Hunt
	Quiz 52	11	TT	80	Hunt
	Lab. 53	12-2	MWF	53	Heller
	Quiz 53	12	TT	75	Heller
	Lab. 54	3-5	MWF	53	Mansfield-Savoy
	Quiz 54	3	TT	80	Mansfield

[1]Credit in Chem. 105 will not be granted to students who have received credit in Chem. 104 or 106. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 106. INORGANIC CHEMISTRY:- Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. Prerequisite: Chemistry 101, 102, or 103.

5 hours[1]	Lec. T	3	TT	210	Rietz
	Lab. 62	3-5	MWF	53	Rietz-Savoy
	Quiz 62	4	TT	75	Rietz

[1]Credit in Chem. 106 will not be granted to students who have received credit in Chem. 104 or 105. Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY:- For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

5 hours[1]	Lec. F	1	WF	204	Weldon
	Lab. 66	10-12	TT	53	Weldon
	Quiz 66	10	MWF	75	Weldon

[1]Students with 95 or more credit hours receive only 3 hours credit.

Chem. 107. GENERAL CHEMISTRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 67	3-5	TT	53	Weldon-C. J. Perry
	Quiz 67	1	MTT	75	Weldon

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:- A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Pre-medical students requiring more than five hours of General-Inorganic Chemistry are advised to take a two semester sequence instead of Chemistry 109. Prerequisite: High school chemistry, graduation from high school in the upper quarter of the high school class, and high placement score.

Credit					
5 hours[1]	Lec. H	3	MWF	204	Huitema
	Lab. 71	9-12	Th	50	Carbonaro
	Quiz 71	3	TT	76	Carbonaro
	Lab. 72	12-3	F	50	Carbonaro
	Quiz 72	2	MW	76	Carbonaro
	Lab. 73	3-6	Tu	50	
	Quiz 73	4	MW	74	
	Lab. 74	8-11	Tu	50	
	Quiz 74	9	MW	80	

[1] Students with 95 or more credit hours receive only 3 hours credit.

Chem. 110. QUALITATIVE ANALYSIS:- Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106.

Credit					
5 hours	Lec. Q	12	TT	65	Mansfield
	Lab. 76	10-12	M		
		9-12	WF	53	Mansfield
	Quiz 76	9	TT	80	Mansfield

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- Gravimetric and volumetric analysis, stoichiometrical relations, practical applications. Prerequisite: Chemistry 104, 105, or 106.

Credit					
5 hours	Lec. Q	12	TT	204	Babler

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. 81	9-12	MWF	54	Gottlieb
	Quiz 81	10	Tu	74	Gottlieb
	Lab. 82	1-4	MWF	54	Gottlieb
	Quiz 82	3	Th	75	Gottlieb

Chem. 124. QUANTITATIVE ANALYSIS:- For all students in the Chemistry curriculum and Chemical Engineering. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

5 hours	Lec. G	2	WF	204	Babler
	Lab. 86	8-11	MWF	54	Babler
	Quiz 86	2	M	75	Babler

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:- To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Prerequisite: Chemistry 105 or 110.

5 hours	Lec. E	12	WF	204	Crum
	Exam Hour	12	M	204	
	Lab. 91	8-11	WF	52	Seabright
	Quiz 91	8	M	74	Seabright
	Lab. 92	9-12	TT	52	Crum
	Quiz 92	9	M	75	Crum
	Lab. 93	2-5	MW	52	Crum
	Quiz 93	2	F	76	Crum

CIVIL ENGINEERING

C. E. 105. SURVEYING:- Prerequisite: G. E. 101 and Math. 123.

2 hours	Lec. B	9	M	63
	Lab. M	9-12	Tu	63
	Lab. N	9-12	Th	63

C. E. 160. BUILDING CONSTRUCTION:- Prerequisite: Sophomore standing.

3 hours	G	2	MWF	63

C. E. 235. PLAIN CONCRETE:- Prerequisite: Sophomore standing in engineering architecture.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Lab. A	9-11	WF	61	

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:- Open only to freshmen.

3 hours	B1	9	MWF	16	
	C1	10	MWF	16	
	E1	12	MWF	18	Kaucki
	H1	3	MWF	22	Jung
	J1	4	MWF	22	Jung
	N1	10	MTT	17	Kaucki

Econ. 102. PRINCIPLES OF ECONOMICS:- Prerequisite: One year of University work.

3 hours	B1	9	MWF	24	Shaw
	F1	1	MWF	20	Gillett
	G1	2	MWF	24	Gillett
	H1	3	MWF	24	Shaw
	N1	10	MTT	23	Grampp
	P1	11	MTT	20	Jung
	Q1	12	MTT	20	Jung
	T1	3	MTT	23	Grampp

Econ. 103. PRINCIPLES OF ECONOMICS:- Prerequisite: Econ. 102.

3 hours	D1	11	MWF	21	O. Miller
	G1	2	MWF	17	O. Miller
	H1	3	MWF	21	Larson

Econ. 108. ELEMENTS OF ECONOMICS:- Exclusively for non-Commerce students. Not open to those who have had Econ. 102 or 103. Prerequisite: One year of University work.

3 hours	B1	9	MWF	19	Williams
	D1	11	MWF	18	J. R. Morris

Econ. 108. ELEMENTS OF ECONOMICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	MWF	16	Williams
	G1	2	MWF	16	Kaucki
	J1	4	MWF	18	J. R. Morris
	M1	9	MTT	17	Kaucki
	R1	1	MTT	22	Knudson
	U1	4	MTT	20	Knudson

Econ. 136. AMERICAN ECONOMIC HISTORY:- Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790-present. Open only to freshmen and sophomores.

3 hours	B1	9	MWF	21	O. Miller
	C1	10	MWF	38	Dunne
	D1	11	MWF	24	Shaw
	E1	12	MWF	16	Williams
	F1	1	MWF	17	O. Miller
	G1	2	MWF	20	Shaw
	H1	3	MWF	18	Williams
	H2	3	MWF	17	
	J1	4	MWF	24	Geldard
	J2	4	MWF	21	
	N1	10	TT	24	Geldard
			F	23	Geldard
	P1	11	MTT	23	Geldard
	Q1	12	MTT	24	Grampp
	U1	4	MTT	23	Grampp

Econ. 138. EUROPEAN ECONOMIC HISTORY:- The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open only to freshmen and sophomores.

3 hours	G1	2	MWF	22	Geldard

Econ. 170. ELEMENTS OF STATISTICS:- Prerequisite: Econ. 102 or 108. Sophomore standing. Commerce students are required to elect Econ. 170 and will not be allowed credit for Psych. 135 or Math. 161.

Econ. 170. ELEMENTS OF STATISTICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MW	33	Larson
	Prac. I	9-11	F	33	Larson
	D1	11	MW	33	Dunne
	Prac. II	11-1	F	33	Dunne
	F1	1	MW	33	Larson
	Prac. III	1-3	F	33	Larson

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION:- An introduction to educational problems and a general study of the nature of teaching, its opportunities and responsibilities. Through individual work the student is helped to evaluate his potentialities for teaching.

2 hours	N1	10	TT	28	Ricks
	P1	11	TT	28	Ricks
	R1	1	TT	28	Ricks

Ed. 201. FOUNDATIONS OF AMERICAN EDUCATION:- A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

2 hours	D1	11	WF	28	Ricks

ELECTRICAL ENGINEERING

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- Prerequisite: Credit in Physics 107 and Math. 143.

4 hours	Quiz B1	9	MWF	113

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lab. B	9-12	Tu	120	
	Quiz G1	2	MWF	113	
	Lab. G	3-6	Th	120	

ENGLISH

English 101. INTRODUCTION TO POETRY:- Understanding of poetry through the reading and discussion of representative poems. This course with English 102 and 103 meets the general education requirement in humanities in the College of Liberal Arts and Sciences.

3 hours	A1	8	MWF	216	Atwood
	B1	9	MWF	215	I. Miller
	D1	11	MWF	203	Greenwald
	Q1	12	M	216	
			TT	214	F. Johnson
	P1	11	M	224	
			TT	209	J. Johnson
	N1	10	M	228	
			TT	214	Nicholas

English 102. INTRODUCTION TO DRAMA:- Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. This course with English 101 and 103 meets the general education requirement in humanities in the College of Liberal Arts and Sciences.

3 hours	A1	8	MWF	215	Runyan
	E1	12	MWF	202	Mackin
	F1	1	MWF	225	Kogan
	G1	2	MWF	224	
	M1	9	M	228	
			TT	214	Love
	R1	1	M	224	
			TT	214	S. Miller

English 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's Pride and Prejudice, George Eliot's Mill on the Floss,

English 103. INTRODUCTION TO FICTION:- (Concluded).
Dostoevski's Crime and Punishment, Conrad's Victory, and Warren's All the King's Men. This course with English 101 and 102 meets the general education requirement in humanities in the College of Liberal Arts and Sciences.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	203	McNamara
	C1	10	MWF	216	Kerwick
	E1	12	MWF	203	Crawley
	G1	2	MWF	222	
	H1	3	M	227	
			WF	217	Stronks
	J1	4	MWF	215	Hipple
	L1	8	M	227	
			TT	214	Leonhard
	M1	9	M	225	
			TT	209	Karanikas
	Q1	12	M	225	
			TT	215	Griest
	T1	3	M	228	
			TT	209	Nicholas
	U1	4	MTT	214	Cassell

English 113. AMERICAN LITERATURE:- Classic American authors before the Civil War; an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: sophomore standing or exemption from Rhetoric 102.

3 hours	E1	12	MWF	215	Wright
	R1	1	M	229	
			TT	212	Willett

English 114. AMERICAN LITERATURE:- Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	G1	2	MWF	223	Schiller
	A1	8	MWF	214	Wright

English 121. CHIEF ENGLISH WRITERS BEFORE 1800:- Canterbury Tales, Utopia, two plays by Shakespeare, Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas. This course with English 122 and 123 meets the general education requirement in humanities in the College of Liberal Arts and Sciences. This course,

English 121. CHIEF ENGLISH WRITERS BEFORE 1800:- (Concluded). with English 122, is the normal prerequisite to the English major.

Credit	Section	Hours	Days	Room	Instructor
3 hours	G1	2	MWF	221	Blum

English 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:- Wordsworth, Byron, Carlyle's Past and Present, Arnold's prose and poetry, FitzGerald s The Rubaiyat of Omar Khayyam, readings from T. H. Huxley, Browning's poems, and one novel. This course with English 121 and 123 meets the general education requirement in humanities in the College of Liberal Arts and Sciences. This course, with English 121, is the normal prerequisite to the English major.

3 hours	F1	1	MWF	96	Richey

English 123. CHIEF MODERN ENGLISH WRITERS:- Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. This course with English 121 and 122 meets the general education requirement in humanities in the College of Liberal Arts and Sciences.

3 hours	E1	12	MWF	214	Freyer

English 131. INTRODUCTION TO SHAKESPEARE:- Prerequisite: Sophomore standing or exemption from Rhetoric 102.

3 hours	C1	10	MWF	215	Vest

FRENCH

French 101. ELEMENTARY COURSE:- Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

4 hours	A1	8	TWTF	226	Lein
	B1	9	TWTF	224	Skogen
	C1	10	TWTF	224	Skogen
	C2	10	TWTF	226	Lein
	D1	11	TWTF	224	Skogen
	E1	12	TWTF	228	Cowles
	F1	1	TWTF	224	Cowles

French 101. ELEMENTARY COURSE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	H1	3	TWTF	226	Meyer
	J1	4	TWTF	228	Meyer

French 102. ELEMENTARY COURSE:- Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

4 hours	B1	9	TWTF	226	Lein
	D1	11	TWTF	226	Cowles
	H1	3	TWTF	224	Cowles

French 103. MODERN FRENCH:- Rapid reading of modern authors, syntax, and composition. Prerequisite: French 102 or two years of high school French.

4 hours	B1	9	TWTF	228	Schuyler
	C1	10	TWTF	228	Schuyler
	E1	12	TWTF	226	Lein

French 104. MODERN FRENCH:- Continuation of French 103. Prerequisite: French 103 or three years of high school French.

4 hours	D1	11	TWTF	228	Schuyler
	F1	1	TWTF	226	Skogen

French 201. INTRODUCTION TO FRENCH LITERATURE:- Prerequisite: French 104 or four years of high school French.

3 hours	F1	1	MWF	228	Schuyler

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:- Prerequisite: Plane Geometry.

3 hours	A1	8-10	MWF	135
	A2	8-10	MWF	136
	A3	8-10	MWF	137
	A4	8-10	MWF	141
	B1	10-12	MWF	135

G. E. 101. ELEMENTS OF DRAWING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	B2	10-12	MWF	136	
	B3	10-12	MWF	137	
	B4	10-12	MWF	141	
	C1	12-2	MWF	135	
	C2	12-2	MWF	136	
	C3	12-2	MWF	137	
	C4	12-2	MWF	141	
	D1	2-4	MWF	135	
	D2	2-4	MWF	136	
	D3	2-4	MWF	137	
	D4	2-4	MWF	141	
	E1	4-6	MWF	135	
	E2	4-6	MWF	136	
	E3	4-6	MWF	137	
	E4	4-6	MWF	141	
	F1	8-11	TT	135	
	F3	8-11	TT	136	
	F4	8-11	TT	141	
	G1	11-2	TT	135	
	G3	11-2	TT	136	
	G4	11-2	TT	141	

G. E. 102. ENGINEERING GEOMETRY:- Prerequisite: Plane geometry.

3 hours	A5	8-10	MWF	143
	A7	8-10	MWF	146
	B5	10-12	MWF	143
	C5	12-2	MWF	143
	D5	2-4	MWF	143
	F5	8-11	TT	143
	G5	11-2	TT	143

G. E. 107. ARCHITECTURAL PROJECTIONS:- Prerequisite: Plane geometry.

2 hours	A6	8-10	MWF	145
	B6	10-12	MWF	145
	C6	12-2	MWF	145
	D6	2-4	MWF	145
	F6	8-11	TT	145
	G6	11-2	TT	145

G. E. 108. ARCHITECTURAL PROJECTIONS:- Prerequisite: G. E. 107.

Credit	Section	Hours	Days	Room	Instructor
2 hours	B7	10-12	MWF	146	
	D7	2-4	MWF	146	

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:- Prerequisite: G. E. 101 and G. E. 102.

2 hours	C7	12-2	MWF	146	

G. E. 112. GENERAL ENGINEERING TECHNOLOGY:- Prerequisite: G. E. 101 and G. E. 102.

2 hours	F2	8-10	TT	136	
	G2	10-12	TT	136	

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:- The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz.

5 hours[1]	Lec. N1	10	TT	218	Finney
	Quiz A1	8	MWF	13	Rheumer
	Quiz C1	10	MWF	13	Finney
	Quiz D1	11	MWF	13	Rheumer
	Quiz E1	12	MWF	13	
	Quiz G1	2	MWF	13	Finney
	Quiz H1	3	MWF	13	

[1]Students with 95 or more credit hours receive only 4 hours credit

Geog. 104. WORLD REGIONAL GEOGRAPHY:- Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Prerequisite: Geography 101 or consent of instructor.

3 hours[1]	N1	10	TTF	14	Colby
	R1	1	MTT	14	Colby

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:- Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others.

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	D1	11	MWF	14	Finney

[1]Students with 95 or more credit hours receive only 2 hours credit.

Geog. 111. INTRODUCTORY METEOROLOGY:- The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Prerequisite: Geography 101 or consent of instructor.

3 hours	B1	9	MWF	13	Rheumer
	F1	1	MWF	13	Rheumer

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:- Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences.

4 hours[1]	Lec. R	1	TT	204	Karpinski
	Lab. 1	8-10	Tu	42	Kurs
	Quiz 1	8	Th	42	Kurs
[1]Students with 95	Lab. 2	9-11	Th	42	Karpinski
or more credit hours	Quiz 2	10	Tu	42	Karpinski
receive only 3 hours	Lab. 3	12-2	W	42	Kurs
credit.	Quiz 3	12	M	42	Kurs
	Lab. 4	12-2	F	42	DeMar
	Quiz 4	1	M	42	DeMar
	Lab. 5	2-4	W	42	Kurs
	Quiz 5	3	M	42	Kurs
	Lab. 6	2-4	F	42	DeMar
	Quiz 6	2	M	42	DeMar

Geol. 102. HISTORICAL GEOLOGY:- Evolution of the earth and its life. Lectures and laboratory. Prerequisite: Geology 101, or Division of General Studies 141.

Geol. 102. HISTORICAL GEOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. N	10	TT	65	DeMar
	Lab. 11	10-12	M	42	DeMar
	Quiz 11	10	F	42	DeMar

[1]Students with 95 or more credit hours receive only 3 hours credit.

Geol. 131. MINERALOGY:- A systematic study of minerals and common rocks. Lecture and laboratory. Prerequisite: One semester of college chemistry.

3 hours	Sec. A	8-10	MWF	42-53	Kurs

Geol. 150. GEOLOGY FOR ENGINEERS:- Prerequisite: Sophomore standing in the College of Engineering.

3 hours	Lec. G	2	MW	65	Karpinski
	Lab. 21	3-5	Tu	42	Karpinski
	Lab. 22	3-5	Th	42	Karpinski

GERMAN

German 101. ELEMENTARY COURSE:- Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

4 hours	A1	8	TWTF	220	Kauf
	A2	8	TWTF	223	Braunfeld
	B1	9	TWTF	220	Macdonald
	B2	9	TWTF	223	Vardaman
	C1	10	TWTF	220	Kauf
	D1	11	TWTF	220	Teichmann
	D2	11	TWTF	223	Macdonald
	E1	12	TWTF	220	Braunfeld
	E2	12	TWTF	223	Hartoch
	F1	1	TWTF	220	Teichmann
	F2	1	TWTF	223	Willner
	H1	3	TWTF	223	Willner
	J1	4	TWTF	220	Hartoch

German 102. ELEMENTARY COURSE:- Continuation of German 101. Oral practice, reading and grammar. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

Credit	Section	Hours	Days	Room	Instructor
4 hours	C1	10	TWTF	221	Macdonald
	E1	12	TWTF	221	Teichmann
	F1	1	TWTF	221	Macdonald
	H1	3	TWTF	221	Teichmann

German 103. INTERMEDIATE COURSE:- Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, or two years of high school German, or equivalent.

4 hours	B1	9	TWTF	222	Kauf
	C1	10	TWTF	222	Braunfeld
	D1	11	TWTF	222	Willner
	E1	12	TWTF	222	Kauf
	F1	1	TWTF	222	Hartoch
	H1	3	TWTF	222	Hartoch

German 104. INTERMEDIATE COURSE:- Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, or three years of high school German, or equivalent.

4 hours	B1	9	TWTF	221	Braunfeld
	E1	12	TWTF	224	Willner

German 113. PRACTICE IN CONVERSATION:- Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

2 hours	R1	1	TT	228	Vardaman

HISTORY

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION TO 1815:- Europe from the age of the great discoveries to the close of the Napoleonic wars.

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION TO 1815:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. B1	9	MW	213	Nicholson
	Quiz C1	10	WF	20	Goodman
	Quiz E1	12	WF	28	Nicholson
	Quiz G1	2	MW	28	Nicholson
	Quiz H1	3	MW	28	Nicholson
	Quiz P1	11	TT	21	Goodman
	Lec. P1	11	TT	213	Unfer
	Quiz C1	10	MW	97	Unfer
	Quiz D1	11	MW	97	Unfer
	Quiz M1	9	TT	97	Unfer
	Quiz N1	10	TT	97	Goodman

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 131. HISTORY OF ENGLAND TO 1688:- A survey of the political and constitutional, social and economic, church and cultural, and imperial history of the British people from the beginning of English history through the revolution of 1688.

4 hours[1]	Lec. D1	11	W	213	Bill-Goodman
	Quiz M1	9	TTF	37	Goodman
	Quiz N1	10	TTF	37	Bill
	Quiz P1	11	TTF	37	Bill
	Quiz R1	1	TTF	37	Goodman

[1]Students with 95 or more credit hours receive only 3 hours credit.

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:- Colonial foundation, the movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

3 hours	Lec. C1	10	M	218	S. Jones
	Quiz E1	12	MW	82	S. Jones
	Quiz M1	9	TT	82	S. Jones
	Quiz N1	10	TT	82	Riddle

Hist. 152. HISTORY OF THE UNITED STATES, 1865 TO THE PRESENT:- A century of national life and organizations. Prerequisite: Sophomore standing. Open only to fourth semester students in teacher education.

3 hours	P1	11	M	82	S. Jones
			TT	24	

Hist. 181. THE ANCIENT WORLD:- Ancient empires and Greece. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	82	Nicholson

HUMANITIES

Humanities 101. VALUES IN LITERATURE:- A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities.

4 hours	C1	10	TWTF	229	Kogan
	D1	11	TWTF	221	Jordan
	H1	3	TWTF	228	Blum

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western world on topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course, plus Humanities 152, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

4 hours	C1	10	TWTF	223	Vardaman
	E1	12	TWTF	216	Vardaman
	H1	3	TWTF	220	Schiller

HYGIENE

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- This course is an elective subject for credit as indicated. Students who expect to take Hygiene 110 should fulfill the undergraduate Hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
2 hours[1]	(For Men and Women)				
	A	8	MW		
	B	9	MW		
[1]Students with 95 or more credit hours receive only 1 hour credit.	N	10	TT		
	P	11	TT		
	T	3	TT		
	U	4	TT		

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:- This course is an elective subject for credit as indicated. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more intensive study of personal and community Hygiene. It is especially designed for teachers, coaches, social workers and others who feel they will need this course in their future professional work.

2 hours[1]	(For Men and Women)				
	F	1	MW		
	G	2	MW		

[1]Students with 95 or more credit hours receive only 1 hour credit.

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about Community Public Health problems and the program is designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, and social workers will need this course in their future professional work. Prerequisite: Hygiene 104.

2 hours	P	11	TT		Dr. Spies

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

3 hours	B1	9	MWF	38	Gillett
	D1	11	MWF	38	Gillett
	F1	1	MWF	38	J. R. Morris
	H1	3	MWF	20	J. R. Morris

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:- Prerequisite: Econ. 102 or 108 or consent of Associate Dean; forty-five credit hours.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	MWF	21	Knudson
	E1	12	MWF	22	Knudson

MATHEMATICS

Math. 102. BASIC MATHEMATICS:- Continuation of Mathematics 101. Prerequisite: Mathematics 101.

3 hours	G1	2	MWF	102	Ragland

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-

3 hours[1]	A1	8	MWF	94	Ockert
	A2	8	MTWTF	96	Scholomiti
	A3	8	MTWTF	111	
[1] Students having 1 1/2	A4	8	MTWTF	101	
entrance units in algebra	A5	8	MTWTF	102	Kuzmanic
receive no credit. Stu-	B1	9	MTWTF	96	Lumley
dents with 95 or more	B2	9	MTWTF	111	Sjoblom
credit hours receive no	B3	9	MTWTF	101	Kuzmanic
credit.	B4	9	MTWTF	102	
	C1	10	MWF	94	Ballard
	C2	10	MTWTF	96	Murphy
	C3	10	MTWTF	101	Nolan
	C4	10	MTWTF	102	Ockert
	D1	11	MTWTF	101	C. E. Olsen
	D2	11	MTWTF	96	Curtis
	D3	11	MTWTF	111	Berglund
	D4	11	MW	37	Vedral
			TT	38	Vedral
			F	97	Vedral
	E1	12	MWF	94	Gordon
	E2	12	MTWTF	96	
	E3	12	MTWTF	111	Feinstein
	E4	12	MTWTF	101	Ondrak

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	F1	1	MWF	94	
	F2	1	MTWTF	106	Sears
	F3	1	MTWTF	104	Dinkines
	F4	1	MTWTF	101	Wiley
	G1	2	MWF	94	Gordon
	H1	3	MWF	94	
	H2	3	MTWTF	106	Pennisi
	H3	3	MTWTF	111	Lariviere
	H4	3	MTWTF	101	Cullen
	H5	3	MTWTF	97	Ziomek
	J1	4	MWF	94	
	J2	4	MTWTF	106	
	J3	4	MTWTF	111	Lariviere
	J4	4	MTWTF	101	Cullen
	J5	4	MTWTF	102	Hill
	J6	4	MTWTF	103	Ziomek
	P1	11	TT	102	Ragland
			F	76	

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:- This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

No Credit	B1	9	MWF	94	Nolan
	D1	11	MWF	102	
	G1	2	MWF	106	Sears

Math. 109. FUNDAMENTALS OF MATHEMATICS:- For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

4 hours	D1	11	MTWT	104	Hartley

Math. 112. COLLEGE ALGEBRA:- Prerequisite: Entrance algebra, 1 1/2 units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

Math. 112. COLLEGE ALGEBRA:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours[1]	A1	8	MWF	104	Lumley
	A2	8	MWF	100	Sjoblom
	B1	9	MWF	100	Murphy
[1]Students with 95	*B2	9	MWF	103	Vedral
or more credit hours	C1	10	MWF	103	
receive only 2 hours	D1	11	MWF	103	Sjoblom
credit.	*D2	11	MWF	134	Ockert
	E1	12	MWF	100	C. E. Olsen
*For Commerce	*F1	1	MWF	103	Cullen
Students Only.	F2	1	M	74	Ragland
			WF	97	Ragland
	G1	2	MWF	111	
	G2	2	MWF	101	Ziomek
	G3	2	MWF	100	
	H1	3	MWF	100	Hill
	H2	3	MWF	104	Wiley
	J1	4	MWF	100	Alberti
	M1	9	TT	100	Ragland
			M	97	
	N1	10	TT	100	Sears
			F	80	
	P1	11	TT	100	Kuzmanic
			M	80	
	Q1	12	TT	100	Ragland
			M	76	
	Q2	12	TT	102	
			F	80	
	Q3	12	M	80	Kuzmanic
			TT	97	Kuzmanic
	R1	1	TT	100	Ziomek
			F	80	
	T1	3	TT	100	
			M	76	

Math. 114. PLANE TRIGONOMETRY:- Prerequisite: Entrance algebra, 1 1/2 units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

2 hours[1]	L1	8	TT	94	Ockert

[1]Students with 95 or more credit hours receive only 1 hour credit.

Math. 114. PLANE TRIGONOMETRY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	L2	8	TT	103	Sjoblom
	M1	9	TT	94	Vedral
	M2	9	TT	103	
	M3	9	TT	104	Nolan
	N1	10	TT	94	Ondrak
	N2	10	TT	103	C. E. Olsen
	N3	10	TT	104	Sjoblom
	P1	11	TT	94	Ballard
	P2	11	TT	103	
	P3	11	TT	110	Ockert
	Q1	12	TT	94	Cullen
	Q2	12	TT	103	Scholomiti
	Q3	12	TT	113	Hill
	R1	1	TT	94	Alberti
	R2	1	TT	103	Berglund
	R3	1	TT	111	Lariviere
	T1	3	TT	94	Wiley
	T2	3	TT	103	Gordon
	T3	3	TT	104	Hill
	U1	4	TT	94	Wiley
	U2	4	TT	100	Alberti
	U3	4	TT	104	

Math. 123. ANALYTIC GEOMETRY:- Plane and solid analytic geometry. Prerequisite: Mathematics 111 or 112, and 114.

Credit	Section	Hours	Days	Room	Instructor
5 hours[1]	A1	8	MTWTF	105	Ballard
	A2	8	MTWTF	106	Vedral
	B1	9	MTWTF	105	Ondrak
	B2	9	MTWTF	106	C. E. Olsen
	C1	10	MTWTF	105	Curtis
	C2	10	MTWTF	106	
	D1	11	MTWTF	105	Frank
	D2	11	MTWTF	106	Feinstein
	E1	12	MTWTF	105	Nolan
	E2	12	MTWTF	106	Sears
	F1	1	MTWTF	105	Pennisi
	H1	3	MTWTF	105	Scholomiti
	J1	4	MTWTF	105	Gordon

[1] Students with 95 or more credit hours receive only 4 hours credit.

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Prerequisite: Mathematics 122 or 123.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	103	Curtis
	B1	9	MWF	104	Feinstein
	C1	10	MWF	104	Hartley
	D1	11	MWF	100	Ondrak
	D2	11	MWF	94	Scholomiti
	E1	12	MWF	103	Murphy
	E2	12	M	75	Hill
			WF	23	Hill
	F1	1	MWF	100	Berglund
	F2	1	MWF	111	Lariviere
	G1	2	MWF	103	Alberti
	G2	2	MWF	104	Wiley
	H1	3	MWF	103	Gordon

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Prerequisite: Math. 133.

5 hours	B1	9	MTWTF	110	Ballard
	C1	10	MTWTF	111	Berglund
	D1	11	MWThF	144	Dinkines
			Tu	97	
	E1	12	MTWTF	104	Frank
	F1	1	MTWTF	102	Murphy
	H1	3	MTWTF	102	Alberti

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS:- Prerequisite: Math. 132 and 142, or 133 and 143.

3 hours	C1	10	MWF	100	Frank
	E1	12	MWF	102	Pennisi
	G1	2	MWF	105	Dinkines

MECHANICAL ENGINEERING

M. E. 182. MANUFACTURING PROCESSES:- Prerequisite: Sophomore standing in engineering or consent of instructor.

3 hours	B1	9	MWF	65
	E1	12	MWF	65

M. E. 183. MATERIALS CASTING:- Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
3 hours	Lec. C	10	MF	65	
	Lec. F	1	MF	65	
	Lab. A	8-11	Tu	71	
	Lab. B	11-2	W	71	
	Lab. C	2-5	W	71	

M. E. 184. METAL PROCESSING:- Prerequisite: Sophomore standing.

3 hours	Lec. M	9	TT	65	
	Lec. P	11	TT	65	
	Lec. D	11	MF	65	
	Lab. A	11-2	M	64	
	Lab. B	11-2	W	64	
	Lab. C	2-5	F	64	

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:- Organization of the Army and ROTC; Individual weapons and marksmanship; and School of the Soldier and Exercise of Command. Prerequisite: Approval of the Military Science Department.

1 hour	Theory 1X	9	MW	230
	Theory 2X	9	TT	230
	Theory 3X	10	MW	230
	Theory 4X	10	TT	230
	Theory 5X	11	MW	230
	Theory 6X	11	TT	230
	Drill 1	8	M	East End Audit.
	Drill 2	8	Tu	East End Audit.
	Drill 3	8	W	East End Audit.
	Drill 4	8	Th	East End Audit.
	Drill 5	8	F	East End Audit.

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- Map and aerial photograph reading; Basic Tactics; and School of the Soldier and Exercise of Command. Prerequisite: M.S. 101 and M.S. 102 or approval of the Military Science Department.

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	Theory 1X	9	MW	116	
	Theory 2X	9	TT	116	
	Theory 3X	11	MW	116	
	Theory 4X	10	TT	116	
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

Mil. Sci. 205. JUNIOR ADVANCED INFANTRY DRILL AND THEORY:- Leadership; Military teaching methods; Patrolling; Tactics of rifle squad; Tactics of rifle and heavy weapons platoons and companies; and School of the Soldier and Exercise of Command. Prerequisite: Mil. Sci. 103 and 104, successful completion of Armed Forces qualification test, officer-type physical examination and approval of Military Science Department.

3 hours	Theory X	12	MTWT	230	McClenahan
	Drill 1	8	M	East End Audit.	
	Drill 2	8	Tu	East End Audit.	
	Drill 3	8	W	East End Audit.	
	Drill 4	8	Th	East End Audit.	
	Drill 5	8	F	East End Audit.	

MUSIC

Music 100. RUDIMENTS OF THEORY:- Rudiments of music theory. Open to students from other colleges of the University.

2 hours	D1	11	MWF	**354

**Room 354 is in the South Building of the Pier at the West End. Enter the Building at the South side of the roadway down the center of the Pier.

Music 130. INTRODUCTION TO THE ART OF MUSIC:- Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only.

3 hours	C1	10	MWF	354

Music 150. MUSIC ENSEMBLE:- Section A, Band; Section B, Orchestra; Section C, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Suitable instruments of most kinds are available for free use by students.

Credit	Section	Hours	Days	Room	Instructor
1/2 hour	A	*2	TT	354	
	B	12	TT	354	
	C	***11	TT	354	
		3-5	TT	354	

*Band rehearsals often continue for a part or all of the three o'clock hour for students able to arrange their schedules to permit this, but while attendance during the three o'clock is desired, it is not required.

***Students unable to arrange to attend Chorus meetings all four hours each week may still participate with the consent of the director. To earn credit, attendance at rehearsals at least two hours weekly is required.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:- Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	28	D. Morris
	E1	12	MW	14	Page
			F	82	Page
	G1	2	MWF	37	Page
	N1	10	TT	13	Page
			F	97	Page

Phil. 102. LOGIC:- Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

3 hours	E1	12	MWF	37	D. Morris
	F1	1	MWF	28	Page
	N1	10	M	14	D. Morris
			TT	16	D. Morris
	Q1	12	TT	16	D. Morris
		1	Tu	16	D. Morris

Phil. 105. MORAL IDEAS AND PRACTICE:- Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Credit	Section	Hours	Days	Room	Instructor
2 hours	Q1	12	TT	17	Page

PHYSICAL EDUCATION FOR MEN

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

1 hour	C	10	MWF	Gym	Rader
	D	11	MWF	Gym	Rader
	E	12	MWF	Gym	Mann
	F	1	MWF	Gym	Fordham

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-

1 hour	A	***8	MWF	Gym	Versen
	B	9	MWF	Gym	Strnad
	C	10	MWF	Gym	Springer
***Special conditioning	D1	11	MWF	Gym	Versen
section.	D2	11	MWF	Gym	Berrafato
	E1	12	MWF	Gym	Bedard
	E2	12	MWF	Gym	Montcalm
	F	1	MWF	Gym	Mann
	G	2	MWF	Gym	Fordham
	H	3	MWF	Gym	Gedvilas

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Student must have 8:00, 9:00, and 10:00 hours free on Tuesday and Thursday. First class will meet in the men s gym.

1 hour	Mn	*9	TT	Kristufek

*Class will meet for 1 1/2 hours.

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Student must have 9:00, 10:00, and 11:00 hours free on Tuesday and Thursday. First class will meet in the men's gym.

P. E. M. 109. ADVANCED SWIMMING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
1 hour	N1	*10	TT		Kristufek

*Class will meet for 1 1/2 hours.

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-

1 hour	B	9	MWF	Gym	Bedard
	C	10	MWF	Gym	Anderson
	D	11	MWF	Gym	Springer
*Class will meet for	F	1	MWF	Gym	L. H. Miller
1 1/2 hours.	H	3	MWF	Gym	L. H. Miller
	Np	*10	TT	Gym	Bedard
	Pq	*11	TT	Gym	Montcalm

P. E. M. 113. DOUBLES TUMBLING STUNTS:-

1 hour	G	2	MWF	Gym	Frey

P. E. M. 114. APPARATUS STUNTS:-

1 hour	C	10	MWF	Gym	Bedard
	D	11	MWF	Gym	Montcalm
	E	12	MWF	Gym	Frey
*Class will meet for	F	1	MWF	Gym	Frey
1 1/2 hours. Students	H	3	MWF	Gym	Frey
will be released early	Qr	*12	TT	Gym	Montcalm
to participate in extra-	Rs	*1	TT	Gym	Frey
curricular activities.					

P. E. M. 117. BOXING:-

1 hour	C	10	MWF	Gym	Strnad
	D	11	MWF	Gym	Kristufek
	E	12	MWF	Gym	Springer
*Class will meet for	F	1	MWF	Gym	Springer
1 1/2 hours.	G	2	MWF	Gym	Berrafato
	Qr	*12	TT	Gym	Berrafato

P. E. M. 118. WRESTLING:-

1 hour	C	10	MWF	Gym	Mann

P. E. M. 118. WRESTLING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
*Class will meet for 1 1/2 hours. Students will be released early to participate in extra-curricular activities.	D	11	MWF	Gym	Anderson
	E	12	MWF	Gym	Anderson
	F	1	MWF	Gym	Kristufek
	G	2	MWF	Gym	Anderson
	Np	*10	TT	Gym	Strnad
	Pq	*11	TT	Gym	Springer
	Qr	*12	TT	Gym	Versen
	Rs	*1	TT	Gym	Mann

P. E. M. 120. PERSONAL DEFENSE:-

1 hour	E	12	MWF	Gym	Strnad
	H	3	MWF	Gym	Anderson
	Rs	*1	TT	Gym	Springer

*Class will meet for 1 1/2 hours. Students will be released early to participate in extracurricular activities.

P. E. M. 123. WEIGHT LIFTING:-

1 hour	A	8	MWF	Gym	Strnad
	B	9	MWF	Gym	Rader
	C	10	MWF	Gym	Berrafato
*Class will meet for 1 1/2 hours.	D	11	MWF	Gym	Mann
	E	12	MWF	Gym	Berrafato
	F	1	MWF	Gym	Gedvilas
	G	2	MWF	Gym	L. H. Miller
	Lm	*8	TT	Gym	Strnad
	Mn	*9	TT	Gym	Versen
	Pq	*11	TT	Gym	Bedard

P. E. M. 129. VOLLEYBALL:-

1 hour	G	**2	MWF	Gym	Gedvilas
	H	**3	MWF	Gym	Berrafato
	Lm	*8	TT	Gym	Anderson
*Class will meet for 1 1/2 hours. Students will be released early to participate in extra-curricular activities.	Mn	*9	TT	Gym	Strnad
	Np	*10	TT	Gym	Springer
	Pq	*11	TT	Gym	Frey

**Adaptive ONLY.

P. E. M. 129. VOLLEYBALL:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Qr	*12	TT	Gym	Mann
	Rs	*1	TT	Gym	Fordham

*Class will meet for 1 1/2 hours. Students will be released early to participate in extracurricular activities.

P. E. M. 130. BEGINNING BASKETBALL:-

1 hour	A	8	MWF	Gym	Rader
	C	10	MWF	Gym	Versen
	F	1	MWF	Gym	Montcalm

P. E. M. 132. ARCHERY:-

1 hour	Lm	*8	TT	Gym	Rader

*Class will meet for 1 1/2 hours.

P. E. M. 136. BADMINTON:-

1 hour	Lm	*8	TT	Gym	Bedard
	Mn	*9	TT	Gym	Rader
	Np	*10	TT	Gym	Versen
*Class will meet for	Pq	*11	TT	Gym	L. H. Miller
1 1/2 hours. Students	Qr	*12	TT	Gym	Kristufek
will be released early	Rs	*1	TT	Gym	Gedvilas
to participate in extra-curricular activities.					

P. E. M. 139. BACKYARD SPORTS:-

1 hour	A	**8	MWF	Gym	Bedard
	B	**9	MWF	Gym	Versen
	Mn	*9	TT	Gym	Anderson
*Class will meet for	Rs	*1	TT	Gym	Berrafato

1 1/2 hours. Students will be released early to participate in extracurricular activities. **Adaptive ONLY.

P. E. M. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education and have made physical fitness scores high enough to allow free choice of courses, or upon recommendation of the Director of Physical Education. It will be necessary for students to supply their own personal

P. E. M. 140. BOATING AND FISHING:- (Concluded).
equipment, but students are advised to purchase no equipment until after the first meeting of the class. The physical education department will supply boats, canoes, life jackets, etc.

Credit	Section	Hours	Days	Room	Instructor
1 hour	Np	*10	TT	Gym	Rader
	Qr	*12	TT	Gym	Gedvilas

*Class will meet for 1 1/2 hours.

P. E. M. 143. AMERICAN SQUARE DANCE:- (Class will meet in Women's Gymnasium-East End of Pier).

1 hour	F	1	MWF	Auditorium

P. E. M. 150. PROFESSIONAL ORIENTATION:- For students majoring in Physical Education.

2 hours	D	11	WF	Fordham

P. E. M. 153. FITNESS PROGRAMS:- For students majoring in Physical Education.

2 hours	A	8	MWF	Montcalm
		9	TT	

P. E. M. 154. SWIMMING:- For students majoring in Physical Education.

2 hours	B	9	MWF	Kristufek
		8	TT	

P. E. M. 155. GYMNASTICS AND WRESTLING:- For students majoring in Physical Education (second eight weeks).

2 hours	A	*8	MTWTF	Gym	Frey-Mann

*Class will meet 2 hours.

P. E. M. 156. TRACK AND FIELD AND BASEBALL:- For students majoring in Physical Education (first eight weeks).

2 hours	A	*8	MTWTF	Gym	Fordham-L. H. Miller

*Class will meet for 2 hours.

RECREATION 174. CAMP COUNSELING:- For students majoring in Physical Education.

Credit	Section	Hours	Days	Room	Instructor
3 hours	E	12	MWF		Gedvilas

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-

1 hour	D	11	MWF	Audit.	Wawrinecz
	E	12	MWF	Audit.	Wawrinecz
	H	3	MWF	Audit.	Wawrinecz
*Class meets for 1 1/2	**Rs1	1	TT	Audit.	Wawrinecz
hours.	*Tu	3	TT	Audit.	Wawrinecz

**Students will be released early to participate in extracurricular activities.

P. E. W. 102. MODIFIED ACTIVITIES:- (Open only to students assigned by Health Service).

1 hour	E	12	MWF	Audit.	Anzalone

P. E. W. 105. ELEMENTARY RHYTHMS:-

1 hour	B	9	MWF	Audit.	Claypoole
	C	10	MWF	Audit.	Claypoole
	D	11	MWF	Audit.	Claypoole
*Class meets for 1 1/2	*Mn	9	TT	Audit.	Claypoole
hours.	*Np	10	TT	Audit.	Claypoole
	*Pq	11	TT	Audit.	Claypoole

P. E. W. 106. INTERMEDIATE RHYTHMS:- (Prerequisite: P. E. W. 105 or consent of instructor).

1 hour	**Rs	1	TT	Audit.	Claypoole

**Students will be released early to participate in extracurricular activities.

P. E. W. 122. SPEEDBALL - VOLLEYBALL:-

1 hour	C	10	MWF	Audit.	Anzalone

P. E. W. 123. BASKETBALL:-

Credit	Section	Hours	Days	Room	Instructor
1 hour	F	1	MWF	Audit.	Anzalone

P. E. W. 130. BADMINTON:- Students to furnish own equipment.

1 hour	G	2	MWF	Audit.	Anzalone

P. E. W. 140. BOATING AND FISHING:- Open to students who have completed two semesters of physical education or consent of instructor. Students will supply their own personal equipment and the department will furnish canoes, lifejackets, etc.

1 hour	*Pq	11	TT	Audit.	Wawrinecz

*Class meets for 1 1/2 hours.

P. E. W. 141. STUNTS, TUMBLING AND APPARATUS:-

1 hour	*Mn	9	TT	Audit.	Anzalone

*Class meets for 1 1/2 hours.

P. E. W. 143. SQUARE DANCE:-

1 hour	F	1	MWF	Audit.	Wawrinecz

P. E. W. 144. FOLK DANCE:-

1 hour	E	12	MWF	Audit.	Barton

P. E. W. 110. BEGINNING SWIMMING:- (Professional Course).

1 hour	*Pq	11	TT	Town Club	Anzalone

*Class meets for 1 1/2 hours.

P. E. W. 150. PROFESSIONAL ORIENTATION:- (Professional Course).

Credit	Section	Hours	Days	Room	Instructor
2 hours	A	8	MW		Pesavento

P. E. W. 151. BODY MECHANICS, GYMNASTICS, FIELD HOCKEY:- (Professional Course).

2 hours	B	9	MTWTF	Audit.	Pesavento

P. E. W. 153. SOCCER, SPEEDBALL, VOLLEYBALL:- (Professional Course).

1 hour	C	10	MTWTF	Audit.	Pesavento

PHYSICAL SCIENCES

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:- A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical sciences are introduced and coordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101, 102, and D. G. S. 151, 142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

4 hours	Lec. M	9	TT	204	Meloy
	Lab. 1	2-5	M	85	Cowin
	Quiz 1	2	F	74	Cowin
	Lab. 2	10-1	Tu	85	R. L. Miller
	Quiz 2	10	Th	74	R. L. Miller
	Lab. 3	9-12	W	85	R. L. Miller
	Quiz 3	9	M	74	R. L. Miller
	Lab. 4	2-5	W	85	Cowin
	Quiz 4	3	F	74	Cowin
	Lab. 5	9-12	F	85	R. L. Miller
	Quiz 5	10	M	76	R. L. Miller

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- A continuation of Phys. Sci. 101. Credit will not be given for both Phys. Sci. 101, 102, and D. G. S. 141, 142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. Prerequisite: 2 units of high school mathematics or consent of the department.

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. B	9	WF	204	Meloy
	Lab. 11	9-12	M	85	Cowin
	Quiz 11	10	F	74	Cowin
	Lab. 12	2-5	F	85	Meloy
	Quiz 12	2	M	74	Meloy

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Prerequisite: Trigonometry.

5 hours	Lec. X	11	Tu	127
	Lec. Y	1	Tu	127
	Quiz C1	10	MWF	134
	Lab. C	8-11	Th	117
	Quiz E1	12	MWF	134
	Lab. E	11-2	Th	117
	Quiz F1	1	MWF	134
	Lab. F	3-6	Tu	117
	Quiz G1	2	MWF	134
	Lab. G	3-6	W	117
	Quiz H1	3	MWF	144
	Lab. H	11-2	Tu	117

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS):- Prerequisite: Physics 101.

5 hours	Lec. X	11	Th	127
	Quiz C1	10	MWF	113
	Lab. C	8-11	Tu	124
	Quiz E1	12	MWF	113
	Lab. E	3-6	Th	124
	Quiz H1	3	MWF	134
	Lab. H	3-6	Tu	124

Physics 106. GENERAL PHYSICS (MECHANICS):- Prerequisite: Credit or registration in Math. 133.

4 hours	Lec. X	10	M	127

Physics 106. GENERAL PHYSICS (MECHANICS):- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Lec. Y	12	M	127	
	Lec. Z	2	M	127	
	Quiz C1	10	WF	144	
	Lab. C	8-11	Tu	123	
	Quiz E1	12	WF	144	
	Lab. E	12-3	M	123	
	Quiz F1	1	WF	144	
	Lab. F	11-2	Th	123	
	Quiz G1	2	WF	144	
	Lab. G	3-6	Th	123	
	Quiz J1	4	WF	134	
	Lab. J	3-6	Tu	123	
	Quiz L1	8	TT	134	
	Lab. L	8-11	W	123	
	Quiz M1	9	TT	144	
	Lab. M	8-11	F	123	
	Quiz N1	10	TT	144	
	Lab. N	12-3	F	123	
	Quiz P1	11	TT	134	
	Lab. P	12-3	W	123	
	Quiz Q1	12	TT	144	
	Lab. Q	3-6	M	123	

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):-
Prerequisite: Credit or registration in Math. 143, Physics 106.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	10	W	127	
	Lec. Y	1	W	127	
	Quiz F1	1	MF	113	
	Lab. F	11-2	Th	124	
	Quiz H1	3	MF	113	
	Lab. H	3-6	W	124	
	Quiz L1	8	TT	113	
	Lab. L	8-11	F	124	
	Quiz M1	9	TT	134	
	Lab. M	8-11	M	124	
	Quiz P1	11	TT	113	
	Lab. P	12-3	F	124	
	Quiz R1	1	TT	113	
	Lab. R	12-3	M	124	

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):- Prerequisite: Credit or registration in Math. 143, Physics 106.

Credit	Section	Hours	Days	Room	Instructor
4 hours	Lec. X	11	F	127	
	Lec. Y	1	F	127	
	Quiz A1	8	MW	134	
	Lab. A	8-11	Tu	122	
	Quiz B1	9	MW	134	
	Lab. B	8-11	Th	122	
	Quiz N1	10	TT	134	
	Lab. N	8-11	W	122	
	Quiz Q1	12	TT	134	
	Lab. Q	12-3	M	122	
	Quiz R1	1	TT	134	
	Lab. R	3-6	M	122	
	Quiz T1	3	TT	134	
	Lab. T	3-6	W	122	

Physics 341. ELECTRICITY AND MAGNETISM:- Prerequisite: General Physics and Calculus. Registration in Math. 343 or 345 or consent of instructor.

4 hours	Quiz G1	2	MWF	208	
	Lab. G	3-6	Th	208	

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:- A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

3 hours	D1	11	M	28	Gabis
			WF	23	

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance.

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
3 hours	R1	1	MTT	97	Barber

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:- Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

3 hours	B1	9	MWF	82	Gabis
	M1	9	M	37	Barber
			TT	28	
	Q1	12	MTT	28	Barber
	Q2	12	TT	21	Gabis
		1	Tu	21	
	T1	3	TT	21	Gabis
		4	Th	21	
	T2	3	MTT	37	Barber

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:- Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

3 hours	E1	12	MWF	97	Gabis

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

4 hours	Lec. B1	9	WF	218	Howard
	Quiz C1	10	WF	17	Howard
	Quiz D1	11	WF	20	Howard
	Quiz M1	9	TT	18	Howard

Psych. 100. INTRODUCTION TO PSYCHOLOGY:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Quiz N1	10	TT	18	Howard
	Quiz P1	11	TT	18	
	Quiz Q1	12	TT	18	Howard
	Lec. Q1	12	TT	218	Lipman
	Quiz D2	11	WF	22	
	Quiz E1	12	WF	20	
	Quiz H1	3	WF	23	
	Quiz J1	4	WF	23	
	Quiz R1	1	TT	20	
	Quiz T1	3	TT	20	

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:- An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

4 hours	Lec. C1	10	WF	218	Lipman
	Quiz M1	9	TT	19	
	Quiz N1	10	TT	19	Lipman
	Quiz P1	11	TT	19	

RHETORIC

Rhetoric 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination.

No Credit	A1	1	MTWTF	21	Kenny
	A2	8	MWF	202	Helmer
	A3	8	MWF	203	Star
*Admission by consent of Division of Humanities	B1	9	MWF	201	Kenny
	B2	9	MWF	202	Helmer
	*C1	10	MTWTF	202	Kirstein-Hoskins
	C2	10	MWF	201	Kenny
	C3	10	MWF	203	McNamara

Rhetoric 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	*D1	11	MTWTF	202	Kirstein-Hoskins
	D2	11	MWF	201	Schiller
	E1	12	MWF	201	Kenny
	*F1	1	MTWTF	202	Kirstein-Hoskins
	F2	1	MWF	201	Schiller
	G1	2	MWF	201	Kerwick
	G2	2	MWF	202	Prasher
	G3	2	MWF	203	Hegie
	H1	3	MWF	201	Cox
	H2	3	MWF	203	Hegie
	J1	4	MWF	201	Cox
	L1	8	M	220	
			TT	201	
	M1	9	M	220	
			TT	205	Jackman
	M2	9	M	221	
			TT	202	F. Johnson
	N1	10	M	220	
			TT	205	Jackman
	N2	10	M	221	
			TT	203	F. Johnson
	P1	11	M	220	
			TT	201	Leonhard
	P2	11	M	221	
			TT	203	Nicholas
	Q1	12	M	220	
			TT	201	Karanikas
	Q2	12	M	221	
			TT	202	Nicholas
	R1	1	M	220	
			TT	201	Carlson
	T1	3	M	220	
			TT	201	Carlson
	T2	3	M	221	
			TT	202	
	U1	4	M	220	
			TT	201	Carlson
	U2	4	M	221	
			TT	202	

Rhetoric 101. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	205	Mackin
	A2	8	MWF	206	McNamara
	A3	8	MWF	209	I. Miller
	B1	9	MWF	205	Atwood
	B2	9	MWF	206	Mackin
	B3	9	MWF	209	Star
	B4	9	MWF	211	Richey
	C1	10	MWF	205	Atwood
	C2	10	MWF	206	Helmer
	C3	10	MWF	209	Runyan
	C4	10	MWF	211	Star
	D1	11	MWF	205	
	D2	11	MWF	206	
	D3	11	MWF	209	Runyan
	D4	11	MWF	211	Prasher
	D5	11	MWF	212	Hipple
	E1	12	MWF	205	Cox
	E2	12	MWF	206	Hegie
	E3	12	MWF	209	Runyan
	E4	12	MWF	211	Star
	F1	1	MWF	205	Helmer
	F2	1	MWF	206	Kerwick
	F3	1	MWF	209	Mackin
	F4	1	MWF	211	McNamara
	F5	1	MWF	212	I. Miller
	F6	1	MWF	214	Prasher
	G1	2	MWF	205	
	G2	2	MWF	206	Cox
	G3	2	MWF	209	Hipple
	G4	2	MWF	211	Greenwald
	G5	2	MWF	212	Freyer
	G6	2	MWF	214	Crawley
	H1	3	MWF	205	
	H2	3	MWF	206	Prasher
	H3	3	MWF	209	Kerwick
	H4	3	MWF	211	Hipple

Rhetoric 101. FRESHMAN RHETORIC AND COMPOSITION:- (Continued).

Credit	Section	Hours	Days	Room	Instructor
	H5	3	MWF	212	
	H6	3	MWF	214	Greenwald
	H7	3	MWF	215	Freyer
	H8	3	MWF	216	Crawley
	J1	4	MWF	203	Hegie
	J2	4	MWF	205	
	J3	4	MWF	206	Greenwald
	J4	4	MWF	209	Freyer
	J5	4	MWF	211	Crawley
	J6	4	MWF	216	
	L1	8	M	221	
			TT	202	Jordan
	L2	8	M	222	
			TT	203	Karanikas
	L3	8	M	223	
			TT	205	Kogan
	L4	8	M	224	
			TT	206	Willett
	M1	9	M	222	
			TT	203	Jordan
	M2	9	M	223	
			TT	201	Kogan
	M3	9	M	224	
			TT	206	Leonhard
	N1	10	M	222	
			TT	201	Karanikas
	N2	10	M	223	
			TT	206	Willett
	N3	10	M	224	
			TT	209	S. Miller
	P1	11	M	222	
			TT	205	Griest
	P2	11	M	223	
			TT	206	S. Miller
	Q1	12	M	222	
			TT	203	Leonhard
	Q2	12	M	224	
			TT	205	Jordan
	Q3	12	M	227	
			TT	206	Cassell

Rhetoric 101. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	R1	1	M	221	
			TT	203	Timmis
	R2	1	M	222	
			TT	205	J. Johnson
	R3	1	M	223	
			TT	206	Cassell
	T1	3	M	222	
			TT	203	Griest
	T2	3	M	223	
			TT	205	J. Johnson
	T3	3	M	224	
			TT	206	S. Miller
	T4	3	M	225	
			TT	212	
	U1	4	M	222	
			TT	203	Griest
	U2	4	M	223	
			TT	205	J. Johnson

Rhetoric 102. FRESHMAN RHETORIC AND COMPOSITION:- This course provides elementary training and practice in the comprehension and expression of written and oral English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

3 hours	A1	8	MWF	211	Richey
	B1	9	MWF	212	Vest
	B2	9	MWF	214	Wright
	C1	10	MWF	212	I. Miller
	C2	10	MWF	214	Wright
	D1	11	MWF	214	Blum
	D2	11	MWF	215	Richey
	E1	12	MWF	212	Stronks
	F1	1	MWF	203	Atwood
	F2	1	MWF	215	
	G1	2	MWF	216	Stronks
	H1	3	MWF	202	Rudin
	H2	3	MWF	96	
	J1	4	MWF	202	Stronks
	J2	4	MWF	212	Blum

Rhetoric 102. FRESHMAN RHETORIC AND COMPOSITION:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	J3	4	MWF	217	
	L1	8	M	226	
			TT	211	Love
	M1	9	M	226	
			TT	211	Timmis
	M2	9	M	227	
			TT	212	Willett
	N1	10	M	226	
			TT	211	Love
	N2	10	M	227	
			TT	212	Timmis
	N3	10	M	229	
			TT	215	
	P1	11	M	226	
			TT	211	Timmis
	Q1	12	M	226	
			TT	211	K. H. Carlson
	Q2	12	M	223	
			TT	212	Love
	R1	1	M	226	
			TT	211	
	T1	3	M	226	
			TT	211	Cassell

Rhetoric 133. EXPOSITORY WRITING:- Prerequisite: Rhetoric 101 and 102; sophomore standing.

3 hours	G1	2	MWF	215	Rudin

Rhetoric 143. INTERMEDIATE EXPOSITORY WRITING:- Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: a grade of A or B in Rhetoric 102, or permission of the instructor.

3 hours	G1	2	MWF	227

Rhetoric 151. BUSINESS LETTER WRITING:- Prerequisite: Rhetoric 102. This course does not count toward a major in English.

3 hours	L1	8	MTT	229
	M1	9	MTT	229

Rhetoric 151. BUSINESS LETTER WRITING:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
	Q1	12	MTT	229	
	D1	11	MWF	229	Oleksy
	G1	2	MWF	229	Oleksy
	H1	3	MWF	229	Oleksy
	J1	4	MWF	229	Oleksy

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:- A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology.

4 hours[1]	Lec. G1	2	MW	218	Endleman
	Quiz D1	11	WF	16	Corley
	Quiz H1	3	MW	82	Endleman
	Quiz L1	8	TT	16	Corley
	Quiz M1	9	TT	16	Corley
	Quiz T1	3	TT	18	Endleman

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 112. BASES OF AMERICAN LIFE:- A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registration in Political Science 150 or 151 or History 151 or 152.

4 hours[1]	Lec. E1	12	M	218	Bill
	Quiz G1	2	MWF	82	Bill
	Quiz P1	11	TTF	82	Riddle
	Quiz R1	1	MTT	82	S. Jones

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- A general education course designed to bring the student to an understanding of the geographic, economic and political bases of the present world situation.

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:- (Concluded).

Credit	Section	Hours	Days	Room	Instructor
4 hours[1]	Lec. B1	9	M	218	Colby
	Quiz G1	2	MWF	14	
	Quiz M1	9	TTF	14	Colby
	Quiz Q1	12	TTF	14	Colby

[1]Students with 95 or more credit hours receive only 3 hours credit.

Soc. Sci. 116. FAMILY LIVING:- The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

4 hours	Lec. D1	11	WF	218	Klassen, Lipman, Pickett
	Quiz B1	9	WF	17	Klassen
	Quiz C1	10	MW	28	Pickett
	Quiz P1	11	TT	17	Lipman

SOCIOLOGY

Sociol. 100. INTRODUCTION TO SOCIOLOGY:- Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social stratification. Prerequisite: Sophomore standing.

3 hours	A1	8	MWF	28	Corley
	F1	1	M	37	Klassen
			WF	23	Klassen
	G1	2	MWF	97	Klassen
	P1	11	TT	13	Corley
		12	Th	13	Corley

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:- Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

3 hours	B1	9	MW	14	Corley
			F	20	

Sociol. 140. SOCIAL CONTROL:- The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

Credit	Section	Hours	Days	Room	Instructor
3 hours	C1	10	M	37	Klassen
			WF	23	

ANTHROPOLOGY

Anthrop. 102. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology.

3 hours	R1	12	Tu	13	Endleman
		1	TT	13	Endleman
	U1	4	MTT	37	Endleman

SPANISH

Spanish 101. ELEMENTARY SPANISH:- For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

4 hours	A1	8	TWTF	227	Marsh
	B1	9	TWTF	227	Marsh
	C1	10	TWTF	225	Sanchez
	F1	1	TWTF	227	Patlogan
	J1	4	TWTF	225	Tort

Spanish 102. ELEMENTARY SPANISH:- Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

4 hours	E1	12	TWTF	225	Patlogan
	H1	3	TWTF	225	Tort

Spanish 103. INTERMEDIATE SPANISH:- Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

Credit	Section	Hours	Days	Room	Instructor
4 hours	C1	10	TWTF	227	Marsh
	D1	11	TWTF	227	Patlogan
	H1	3	TWTF	227	Patlogan

Spanish 104. INTERMEDIATE SPANISH:- Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

4 hours	B1	9	TWTF	225	Sanchez
	E1	12	TWTF	227	Marsh

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:- Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

2 hours	P1	11	TT	225	Sanchez

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:- Reading of modern authors of Spain and Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

3 hours	D1	11	MWF	225	Sanchez

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Bureau, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

No Credit

Sept. 25 - Nov. 8	B1	9	WF	219	Hoskins
Nov. 13 - Jan. 10	B2	9	WF	219	Hoskins
Sept. 25 - Nov. 8	F1	1	WF	229	Hoskins
Nov. 13 - Jan. 10	F2	1	WF	229	Hoskins

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:- Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

Credit	Section	Hours	Days	Room	Instructor
3 hours	A1	8	MWF	217	Armould
	B1	9	MWF	217	Hovde
	C1	10	MWF	217	Hovde
	C2	10	MWF	219	Crews
	D1	11	MWF	216	Pitt
	D2	11	MWF	219	Crews
	E1	12	MWF	217	Thompson
	E2	12	MWF	219	Goulson
	F1	1	MWF	217	Goulson
	F2	1	MWF	216	Pitt
	G1	2	MWF	217	Thompson
	G2	2	MWF	219	Pitt
	H1	3	MWF	219	Wenzel
	J1	4	MWF	219	Wenzel
	M1	9	MTT	219	Hoskins
	N1	10	M	225	
			TT	217	Pitt
	P1	11	M	227	
			TT	217	Armould
	P2	11	M	228	
			TT	216	Hovde
	Q1	12	M	228	
			TT	217	Armould
	R1	1	M	227	
			TT	217	Hovde
	T1	3	MTT	217	

Speech 105. VOICE AND ARTICULATION:- A drill course for the improvement of the normal speaking voice. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	B1	9	MWF	216	Rigler
	F1	1	MWF	219	Crews

Speech 107. PARLIAMENTARY PROCEDURE:- Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

Credit	Section	Hours	Days	Room	Instructor
2 hours	N1	10	TT	216	Hovde

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:- Study, preparation, and presentation of the chief types of business speeches, with special attention to conference, sales talks, interviews, job applications. Prerequisite: Speech 101; sophomore standing.

2 hours	M1	9	TT	217	Pitt

Speech 117. ARGUMENTATION:- Methods of logical analysis; the kinds and forms of arguments; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Prerequisite: Speech 101; sophomore standing.

3 hours	D1	11	MWF	217	Thompson

Speech 141. ORAL INTERPRETATION OF LITERATURE:- Principles of interpretations, analysis, and oral reading of prose literature and verse. Students with 95 or more credit hours receive only 1 hour credit.

2 hours	N1	10	TT	219	Crews
	P1	11	TT	219	Crews
	R1	1	TT	219	Armould

Speech 161. FUNDAMENTALS OF ACTING:- A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Speech 141.

3 hours	G1	2	MWF	213	Goulson

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 143.

2 hours	T1	3	TT	113

T. A. M. 151. ANALYTICAL MECHANICS (STATICS):- Prerequisite: Registration in Math. 143.

Credit	Section	Hours	Days	Room	Instructor
3 hours	B1	9	MWF	144	
	G1	2	MWF	110	

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

4 hours	C1	10	MWTF	110	
	H1	3	MTWF	110	

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):- Prerequisite: Registration in Math. 143.

5 hours	E1	12	MTWTF	110	

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):- Prerequisite: Credit in Math. 123. For architecture students only.

3 hours	H1	4	MWF	113	

T. A. M. 172. STRENGTH OF MATERIALS:- Prerequisite: T. A. M. 171. For architecture students only.

3 hours	J1	4	MWF	110	

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):- Prerequisite: T. A. M. 150.

3 hours	D1	11	MWF	113	
	D2	11	MWF	110	
	F1	1	MWF	110	

T. A. M. 221. RESISTANCE OF MATERIALS:- Prerequisite: T. A. M. 150, 151, 154, or 156.

3 hours	A1	8	MWF	110	
	R1	1	MTT	113	

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:- Prerequisite: Credit or registration in T. A. M. 221.

1 hour	A	10-12	M	61
	B	8-10	Tu	61
	C	3-5	Tu	61
	D	3-5	Th	61

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TIME TABLE

SECOND SEMESTER, 1957-58

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UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
NAVY PIER

TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 3
Calendar, Second Semester, 1957-58..... 4
Registration Schedule..... 5
Legend for Section Letters..... 6
Schedule of Tuition and Fees..... 6
Chicago Undergraduate Division Calendar, 1958..... 7
Urbana Calendar..... 8
Instructions for Registration..... 9
Final Examination Schedule, Second Semester, 1957-58..... 12

Accountancy..... 13
Anthropology..... 78
Architecture..... 14
Art..... 16
Biological Sciences..... 18
Business Law..... 22
Chemistry..... 22
Civil Engineering..... 28
Economics..... 28
Education..... 31
Electrical Engineering..... 31
English..... 32
French..... 34
General Engineering..... 35
Geography..... 38
Geology..... 39
German..... 40
History..... 42
Humanities..... 43
Hygiene..... 44
Management..... 45
Marketing..... 45
Mathematics..... 45
Mechanical Engineering..... 50
Military Science and Tactics..... 51
Music..... 53
Philosophy..... 54
Physical Education for Men..... 55
Physical Education for Women..... 61
Physical Science..... 64
Physics..... 65
Political Science..... 68
Psychology..... 69
Rhetoric..... 71
Social Science..... 77
Sociology..... 78
Spanish..... 79
Speech..... 80
Theoretical and Applied Mechanics..... 83

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1957/58
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PRE-REGISTRATION ADVISEMENT SCHEDULE
Second Semester, 1957-58

PLACE: Men's Gymnasium

COMMERCE
ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, February 3	1:00	-	4:00	p.m.
F - K	Tuesday, February 4	9:00	-	12:00	noon
L - Q	Tuesday, February 4	1:00	-	4:00	p.m.
R - Z	Wednesday, February 5	9:00	-	12:00	noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS ONLY

A - E	Monday, February 3	1:00	-	4:00	p.m.
F - K	Tuesday, February 4	9:00	-	12:00	noon
L - Q	Tuesday, February 4	1:00	-	4:00	p.m.
R - Z	Wednesday, February 5	9:00	-	12:00	noon

NEW STUDENTS

	Wednesday, February 5	1:00	-	4:00	p.m.

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

CALENDAR

Second Semester, Spring 1958

Fri., Jan. 31 - Wed., Feb. 5	Orientation Period
Thurs., Feb. 6 - Fri., Feb. 7	Registration (Students registering for less than twelve hours report at 1:00 p.m., Friday, February 7, for registration)
Mon., Feb. 10	Instruction Begins
Thurs., Feb. 13, 1:00 p.m.	Earliest time at which program changes may be made
Fri., Feb. 21, 4:00 p.m.	Latest date of withdrawal for rebate in full
Sun., Mar. 2	University Day (University opened, 1868)
Fri., Mar. 28, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals
Mon., Mar. 31	Last date for veterans who are first semester freshmen to apply to the Student Counseling Bureau, Room 300, to take the General Educational Development Tests, College level. The tests will be given on Monday, April 7, from 9:30 a.m. to 5:00 p.m.
Thurs., Apr. 3, 6:00 p.m.	Easter Vacation Begins
Fri., Apr. 4, 12:00 noon	Mid-semester grades are due
Fri., Apr. 4, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees
Wed., Apr. 9, 8:00 a.m.	Easter Vacation Ends
Fri., May 2, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawal
Fri., May 9	Honors Day
Fri., May 9	Students withdrawing on or after this date must petition for readmission
Fri., May 30	Memorial Day
Thurs., May 29 - Sat., June 7	Semester Examinations

REGISTRATION SCHEDULE

Second Semester, Spring, 1957-58

You will register in the Men's Gymnasium according to the schedule below:

FORMER STUDENTS

Former students paying their tuition and fees after 4:00 p.m., Friday, February 7, 1958, will be assessed a late registration fee of $5.00.

A - B	Thursday, February 6	8:30 a.m.
C - D	Thursday, February 6	9:30 a.m.
E - G	Thursday, February 6	11;30 a.m.
H - K	Thursday, February 6	2:00 p.m.
L - M	Friday, February 7	8:30 a.m.
N - R	Thursday, February 6	3:00 p.m.
S	Thursday, February 6	1:00 p.m.
T - Z	Thursday, February 6	10:30 a.m.

NEW STUDENTS

A - D	Friday, February 7	11:30 a.m.
E - K	Friday, February 7	1:00 p.m.
L - R	Friday, February 7	10:30 a.m.
S - Z	Friday, February 7	9:30 a.m.

Students registering for less than 12 semester hours will register at 1:00 p.m., Friday, February 7.

All stations will close promptly at 5:00 p.m., Thursday, February 6 and at 4:00 p.m., Friday, February 7.

All University offices will be closed on Saturday, February 8, 1958.

Late registration will begin on Monday, February 10, 1958.

Instruction will begin on Monday, February 10, 1958.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more.....$ 75.00
(Eight hours or less pay tuition of $5 a semester hour).

Non-residents of Illinois taking nine hours or more.....$250.00
(Eight hours or less pay tuition at rate of $20 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours.....$ 7.00
(Less than 5 hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours.....$ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours.....$ 6.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the second semester 1956-57 or the summer session 1957 must pay a General Deposit of.....$ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who pays his tuition and fees after 6:00 p.m., Friday, February 7, in the amount of.....$ 5.00

LEGEND FOR SECTION LETTERS*

HOUR	5, 4, and 3 hour courses MWF	MTT or TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1958

Second Semester (Spring 1958)

Feb. 1, Sat. - Feb. 5, Wed.	Orientation Period
Feb. 6, Thurs. - Feb. 7, Fri.	Registration
Feb. 10, Mon.	Instruction begins
Mar. 2, Sun.	University Day (University opened, 1868)
Apr. 3, Thurs., 6 p.m.	Easter Vacation begins
Apr. 9, Wed., 8 a.m.	Easter Vacation ends
May 9, Fri.	Honors Day
May 30, Fri.	Memorial Day (Holiday)
May 29, Thurs. - June 7, Sat.	Semester Examinations

Summer Session 1958

June 20, Fri.	Registration
June 23, Mon.	Instruction begins
July 4, Fri.	Independence Day (Holiday)
Aug. 15, Fri. - Aug. 16, Sat.	Summer Session Examinations

First Semester (Fall 1958)

Sept. 3, Wed. - Sept 10, Wed.	Orientation Period
Sept. 11, Thurs. - Sept. 12, Fri.	Registration
Sept. 15, Mon.	Instruction begins
Nov. 26, Wed., 6 p.m.	Thanksgiving vacation begins
Dec. 1, Mon., 8 a.m.	Thanksgiving vacation ends
Dec. 3, Wed.	Illinois Day (State admitted to Union, 1818 - Not a holiday)
Dec. 17, Wed., 6 p.m.	Christmas vacation begins
Jan. 5, Mon., 8 a.m.	Christmas vacation ends
Jan. 16, Fri. - Jan. 24, Sat.	Semester Examinations

UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

CALENDAR 1958

Second Semester (Spring 1958)

Jan. 28, Tues. - Jan. 31, Fri.	Entrance Examinations
Feb. 3, Mon. - Feb. 5, Wed.	Registration
Feb. 6, Thurs.	Instruction begins
Mar. 2, Sun.	University Day (University opened, 1868)
April 3, Thurs., 1 p.m.	Easter vacation begins
April 8, Tues., 1 p.m.	Easter vacation ends
May 2, Fri.	Honors Day (Classes dismissed at noon)
May 30, Fri.	Memorial Day (Holiday)
May 27, Tues.	Study Day, classes dismissed
May 28, Wed. - June 6, Fri.	Semester Examinations
June 14, Sat.	Commencement Exercises

Summer Session, 1958

June 3, Tues. - June 6, Fri.	Entrance Examinations
June 16, Mon.	Registration
June 17, Tues.	Instruction begins
July 4, Fri.	Independence Day (Holiday)
Aug. 8, Fri. - Aug. 9, Sat.	Summer Session Examinations

First Semester (Fall 1958)

Sept. 2, Tues. - Sept. 5, Fri.	Entrance Examinations
Sept. 8, Mon. - Sept. 13, Sat.	Freshman Week and Registration
Sept. 15, Mon.	Instruction begins
Nov. 26, Wed., 1 p.m.	Thanksgiving vacation begins
Dec. 1, Mon., 1 p.m.	Thanksgiving vacation ends
Dec. 3, Wed.	Illinois Day (State admitted to Union, 1818 - Not a holiday)
Dec. 20, Sat., 1 p.m.	Christmas vacation begins
Jan. 5, Mon., 8 a.m.	Christmas vacation ends
Jan. 15, Thurs.	Study Day, classes dismissed
Jan. 16, Fri. - Jan. 24, Sat.	Semester Examinations

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND, OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

AUTHORIZATION CARD, No. 1

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's Copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

DEAN'S PROGRAM CARD, No. 2

4. Print your I.D. number (but not your name), semester hours earned, local address, and telephone number on the front of the No. 2 Dean's Program Card. Then copy your program showing lecture, laboratory and quiz on separate lines on the front of this card and secure your adviser's signature. Courses must be listed by department and course number (e.g., English 101) and not by the descriptive title (e.g., Introduction to Poetry). Turn card over and fill out the back of the No. 2 Dean's Program Card in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program Card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course as separate lecture and/or laboratory cards

INSTRUCTIONS FOR REGISTRATION (Continued)

in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH NO. 5 CLASS CARD issued to you in box provided (further indicated by arrows) but do not write your name on these cards.

RECORDER'S INFORMATION CARD, No. 3

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and LEFT margin of this card. PRINT PLAINLY.

VETERAN'S CARD, No. 4

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on your Student's Copy of Registration form agrees with program on the No. 2 Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on your Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2, and then proceed to Station No. 3 for class card check.

11. All veterans stop at Station 4.

FEE CARD NO. 6 and IDENTIFICATION CARD NO. 7

12. Submit all cards to the Recorder's fee card clerks at Station 5 and obtain a No. 6 Fee Assessment Card and a No. 7 Fee Receipt Card. Write your name and address on the No. 7 Identification Card.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 5, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to the clerks at Station 7. Your cards should be presented in the following

INSTRUCTIONS FOR REGISTRATION (Completed)

sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in R.O.T.C., report to Station 8.

16. Present your No. 6, 7, and 4 cards to clerks at Station 9.

17. Present cards No. 6, 7, and 4, if applicable, to one of the cashiers and pay your fees. Do not present cards No. 1, 2, 3, and 5 to cashiers. The No. 7 Fee Receipt Card and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

18. Submit all cards to the clerks at Station 12 in the following sequence: No. 7, 1, 2, 3, all No. 5 cards, and No. 4, if applicable. The clerks at this station will return only the No. 7 card to you.

19. Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

FINAL EXAMINATION SCHEDULE, II 1957-58
May 29-June 7, 1958, inclusive

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes Meeting at	ALL COURSES MEETING ON THE MWF SEQUENCE ONLY	ALL COURSES OTHER THAN THOSE MEETING ON THE MWF SEQUENCE ONLY
8:00	Wed. June 4, 1:30 p.m.*	Wed. June 4, 1:30 p.m.*
9:00	Mon. June 2, 9:00 a.m.	Sat. May 31, 9:00 a.m.
10:00	Thu. May 29, 9:00 a.m.	Thu. June 5, 9:00 a.m.
11:00	Sat. June 7, 9:00 a.m.	Tue. June 3, 9:00 a.m.
12:00	Fri. June 6, 9:00 a.m.	Wed. June 4, 9:00 a.m.
1:00	Fri. June 6, 1:30 p.m.	Mon. June 2, 1:30 p.m.
2:00	Sat. June 7, 1:30 p.m.	Wed. June 4, 1:30 p.m.
3:00	Sat. May 31, 1:30 p.m.	Thu. May 29, 1:30 p.m.
4:00	Thu. June 5, 1:30 p.m.	Tue. June 3, 1:30 p.m.

Examinations in courses involving one lecture section may be held at the time scheduled for the lecture. (Single lectures will be construed to be on the MWF or MTT sequence only.) In the instance of sections combining under a single lecture which occurs only once in a sequence, any conflicts with a final examination which is being given according to the regularly scheduled examination must be resolved by the Department teaching the lecture course and so combining the section. Courses with two or more lecture sections will either have examinations at the times of the lectures or will be combined into a single examination. In cases of conflicts involving two lectures on a single sequence, the divisions concerned will make individual arrangements.

ONE HOUR CLASSES: Examinations for one-hour classes are to be arranged by the instructors concerned and to be held within the examination period.

* The college office of the student concerned will resolve any conflict, except combined section conflicts, occasioned by this scheduling.

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	19	HEDISH
C1	MWF	10	24	KABBES
C2	MWF	10	19	HEDISH
E1	MWF	12	24	KABBES
F1	MWF	1	21	ANDREWS
G1	MWF	2	24	SCHNEIDER
H1	MWF	3	38	KABBES
J1	MWF	4	38	SCHNEIDER
M1	MTT	9	38	ANDREWS
P1	MTT	11	21	ANDREWS
R1	MTT	1	23	FOX
T1	MTT	3	24	FOX

Accy. 105. ACCOUNTING PROCEDURE:- Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

B1	MWF	9	21	LIPKIN
C1	MWF	10	18	MORICI
D1	MWF	11	20	LIPKIN
E1	MWF	12	21	HEDISH
E2	MWF	12	17	MORICI
F1	MWF	1	19	LIPKIN
G1	MWF	2	20	HEDISH
H1	MWF	3	22	ANDREWS
N1	MTT	10	23	MALINOSKY
Q1	MTT	12	20	MALINOSKY
U1	MTT	4	18	MALINOSKY

Accy. 106. ELEMENTARY COST ACCOUNTING:- Accounting for production management Principles and methods of accounting for managerial control of costs of production. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	18	MORICI
F1	MWF	1	17	MORICI
T1	MTT	3	18	MALINOSKY

Accy. 108. INTERMEDIATE ACCOUNTING:- Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

C1	MWF	10	38	SCHNEIDER
E1	MWF	12	38	SCHNEIDER
G1	MWF	2	38	KABBES
H1	MWF	3	20	LIPKIN

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107. Credit 3 hours.

LEC	D	W	11	251
LAB	A	MTTF	8 10	241
LAB	B	MTTF	10 12	241
LAB	C	MTTF	12 2	241
LAB	D	MTTF	3 5	241

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Credit 2 hours. Prerequisite: Architecture 131 or sophomore standing.

LEC	T	TT	3	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Credit 3 hours. Prerequisite: Architecture 101; credit or registration in General Engineering 108.

LEC	G	W	2	251
LAB	A	MTTF	9 11	241
LAB	B	MF	2 5	241
		W	3 5	241

Arch. 132. ARCHITECTURAL DESIGN:- Continued study of the fundamentals of architectural design. Credit 3 hours. Prerequisite: Architecture 131.

LEC	F	W	1	251
LAB	A	MF	8 11	242
		W	8 10	242
LAB	B	TT	9 12	242
		W	10 12	242
LAB	C	MF	3 6	242
		W	3 5	242

Arch. 133. ARCHITECTURAL DESIGN:-Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Credit 3 hours. Prerequisite: Architecture 132.

LAB	A	MWF	3 6	242

Arch 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Registration in Architecture 131.

LEC	R	TT	1	251

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:-Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Credit 2 hours. Prerequisite: Architecture 141.

LEC F MF 1 251

Arch. 143. MATERIALS AND METHODS OF CONSTRUCTION III:-Semi-fireproof construction; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Architecture 142.

LEC P TT 11 251

Arch. 214. HISTORY OF MEDIEVAL ARCHITECTURE:- A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Credit 3 hours. Prerequisite: Architecture 113 or consent of instructor.

LEC C MWF 10 251

ART

Art. 111. SURVEY OF ART HISTORY:-Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. Credit 3 hours.

LEC H MWF 3 251

Art. 115. ART APPRECIATION:-An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. Credit 3 hours.

LEC B MWF 9 251

Art 181. FREEHAND DRAWING:-Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours.

LAB	A	MWF	8 10	83
LAB	B	MWF	10 12	83
LAB	C	MWF	12 3	83

Art. 182. FREEHAND DRAWING:-Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 181.

LAB	A	MWF	8 10	84
LAB	B	MF	10 1	84
LAB	C	TT	11 2	84
LAB	D	MWF	3 5	84
LAB	E	TT	8 11	84

Art. 183. FREEHAND DRAWING:-Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 182.

LAB	A	MWF	11 1	91
LAB	B	TT	3 6	91

Art 184. FREEHAND DRAWING:-Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 183.

LAB	A	TT	8 11	91
LAB	B	MF	8 11	91
LAB	C	MF	2 5	91

Art 281 FREEHAND DRAWING:-Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184. Credit 2 hours.

LAB	A	TT	8 11	83	

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:-This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	R1	TT	1	218	PICKETT
LAB	1	TT	3 5	48	KRISHNA
LAB	2	TT	8 10	46	ROUFFA GLASSMAN
LAB	3	TT	10 12	46	GLASSMAN
LAB	4	TT	8 10	48	SHOMAY
LAB	5	MW	12 2	46	PICKETT
LAB	6	MW	10 12	46	PRESLEY
LEC	M1	TT	9	210	PRESLEY
LAB	7	MW	8 10	46	PRESLEY
LAB	8	MW	2 4	46	PRESLEY
LAB	9	MW	12 2	48	BOND
LAB	10	TT	12 2	48	KRISHNA
LAB	11	MF	4 6	46	KRISHNA
LEC	T1	TT	3	213	LITTLE
LAB	12	TT	4 6	46	LITTLE
LAB	13	TT	10 12	48	PRESLEY
LAB	14	TT	12 2	46	RAWSON
LAB	15	M	2 4	48	KRISHNA
		F	2 4	46	
LAB	16	MF	4 6	48	RAWSON

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:-Application of biological principles to the living world. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	Q1	TT	12	218	MADISON ROUFFA
LAB	1	M	8 10	44	BOND
		W	8 10	43	
LAB	2	WF	12 2	44	RAWSON
LAB	3	MF	2 4	43	SCUDDER
LAB	4	WF	4 6	44	CHAPP
		F	10 12	43	
LAB	6	MW	10 12	43	SCUDDER
LAB	7	TT	3 5	44	CHAPP
LEC	E1	WF	12	218	CHAPP GLASSMAN
LAB	8	WF	10 12	44	RAWSON
LAB	9	TT	12 2	43	BOND
LAB	10	TT	8 10	44	MADISON
LAB	11	M	2 4	44	BOND
		W	2 4	43	
LAB	12	WF	2 4	44	CHAPP
LAB	13	TT	12 2	44	CHAPP

Biology 111. GENERAL BOTANY:-A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of instructor.

LEC	N1	TT	10	213	ROUFFA
LAB	1	WF	10 12	48	ROUFFA
LAB	2	WF	2 4	48	ROUFFA

Biology 115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY):-Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 102 or 111.

LEC	M1	TT	9	21	GLASSMAN
LAB	1	WF	8 10	48	GLASSMAN

Biology 121. MICROBIOLOGY:-A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R1	TT	1	65	MADISON
LAB	1	MF	8 10	43	MADISON

Biology 126. ADVANCED GENERAL BACTERIOLOGY:-General technic, special apparatus and methods. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 121, credit or registration in Chemistry 105.

LEC	N1	TT	10	45	MADISON
LAB	1	MF	8 10	43	MADISON

Biology 131. GENERAL ZOOLOGY:-A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	C1	WF	10	213	SHOMAY
LAB	1	WF	8 10	44	SHOMAY
LAB	2	TT	10 12	44	SHOMAY

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:-Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	G1	MWF	2	210	SHANK
LAB	1	MWF	8 10	45	SPIRAKIS
LAB	2	MWF	10 12	45	SPIRAKIS
LAB	3	TT	11 2	45	SANGSTER

Biology 136. BIRD STUDY:-Native birds; their identification, food, relations, seasonal distribution, migration activities, economic importance, and conservation. Credit 2 hours.

LEC	M1	TU	9	45	SHANK
LAB	1	TH	8 10	45	SHANK

Biology 141. VERTEBRATE PHYSIOLOGY:-The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 102, or consent of the instructor.

LEC	P	TT	11	43	PICKETT
LAB	1	TH	8 11	43	SPIRAKIS
	1	T	9	43	SPIRAKIS

Biology 333. VERTEBRATE EMBRYOLOGY:-The development of the vertebrate body and its organs. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 132, junior standing.

LEC	F1	MWF	1	210	SANGSTER
LAB	1	MWF	2 4	45	SANGSTER
LAB	2	MWF	4 6	45	SCUDDER

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:-Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Credit 3 hours. See Business Law 202 for provisonal reduced credit.

B1	MWF	9	24	FOX
D1	MWF	11	23	FOX

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY:-For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry. 102. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	N1	TT	10	204	HUNT
LAB	1	MWF	8 10	53	JOHNSON
	1	TT	8	75	JOHNSON
LAB	2	MWF	11 1	53	JOHNSON
	2	TT	11	75	JOHNSON
LAB	3	MWF	1 3	53	FARAG
	3	TT	3	76	FARAG

Chem. 102. GENERAL CHEMISTRY:-For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

LEC	C1	WF	10	204	MUELLER
LAB	11	TU	8 10	53	MUELLER
	11	WF	8	75	MUELLER
LAB	12	W	1 3	53	MUELLER
	12	TT	10	76	MUELLER
LAB	13	F	12 2	53	MUELLER
	13	TT	12	76	MUELLER
LAB	14	M	2 4	53	CARBONARO
	14	WF	2	75	CARBONARO
LAB	15	M	3 5	53	SAVOY
	15	TT	10	80	FARAG
LAB	16	TU	10 12	53	LOTHIAN
	16	MW	2	74	JOHNSON

Chem. 103. GENERAL CHEMISTRY:- For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Students who have recived entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 103 or 112.

LEC	P1	TT	11	204	KLAAS
LAB	21	WF	8 10	50	GLASEL
	21	WF	11	75	GLASEL
LAB	22	MW	1 3	50	HELLER
	22	TT	1	76	HELLER
LAB	23	WF	10 12	50	KLAAS
	23	WF	12	74	KLAAS
LAB	24	TT	3 5	50	KLAAS
	24	WF	2	80	KLAAS
LEC	G1	WF	2	204	BACHRACH
LAB	31	TT	10 12	50	HELLER
	31	TT	9	75	HELLER
LAB	32	MW	3 5	50	CARBONARO BACHR
	32	TT	3	75	CARBONARO
LAB	33	MW	11 1	50	HART
	33	TT	11	80	HART
LAB	34	TT	12 2	50	HERZOG
	34	WF	1	74	HERZOG

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:-Limited to students in engineering curricula. Credit 4 hours. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

LEC	C1	WF	10	210	HUITEMA
LAB	36	WF	8 10	50	SACKHEIM
	36	TT	8	74	SACKHEIM
LAB	37	MW	11 1	50	SACKHEIM
	37	TT	12	74	SACKHEIM

LAB	38	MW	2 4	50	HERZOG
	38	WF	9	74	HERZOG
LAB	39	TT	9 11	50	DAFLER
	39	TT	8	76	DAFLER
LAB	40	TT	10 12	50	PERRY
	40	MW	11	74	PERRY
LAB	41	TT	12 2	50	DAFLER
	41	MW	12	76	DAFLER
LAB	42	WF	3 5	50	DAFLER
	42	TT	4	75	DAFLER
LEC	P1	TT	11	210	HUITEMA
LAB	44	TT	9 11	50	SACKHEIM
	44	MF	10	76	SACKHEIM
LAB	45	TT	12 2	50	HART
	45	WF	12	75	HUITEMA
LAB	46	MW	10 12	50	HERZOG
	46	TT	9	80	HERZOG
LAB	47	TT	3 5	50	HUITEMA
	47	WF	2	76	HUITEMA
LAB	48	WF	12 2	50	PERRY
	48	WF	9	75	PERRY
LAB	49	MF	2 4	50	PERRY
	49	TT	4	74	PERRY

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:-For students who are not eligible for Chemistry 104 or 105, Credit 5 hours. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	E1	WF	12	210	HUNT
LAB	51	MWF	8 10	53	SEABRIGHT
	51	TT	9	76	SEABRIGHT
LAB	52	MWF	10 12	53	FARAG
	52	TT	12	80	FARAG

LAB	53	MWF	1 3	53	MANSFIELD COWIN
	53	TT	1	74	MANSFIELD
LAB	54	TT	3 6	53	SAVOY
	54	WF	3	75	SAVOY
LAB	55	MWF	9 11	53	HUNT
	55		12	75	HUNT

Chem. 106. INORGANIC CHEMISTRY:-Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit 5 hours. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	H1	WF	3	204	RIETZ
LAB	61	MWF	11 1	53	SEABRIGHT
	61	TT	11	76	SEABRIGHT
LAB	62	TT	3 6	53	RIETZ
	62	WF	4	74	RIETZ

Chem. 108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS:-For students in curricula in chemistry or chemical engineering. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit is not granted to students who have received credit in Chemistry 104, 105, 106, or 109. Prerequisite: Chemistry 107.

LEC	N1	TT	10	210	WELDON
LAB	66	MWF	8 10	53	WELDON
	66	WF	10	75	WELDON
LAB	67	MWF	1 3	53	LOTHIAN
	67	TT	3	80	LOTHIAN

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:-A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Not open to students who have college credit in chemistry. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the highest quarter of the class.

LEC	F1	MWF	1	204	SCHRAGE
LAB	71	M	9 12	50	COWIN
	71	TT	1	80	SEABRIGHT

Chem. 110. QUALITATIVE ANALYSIS:-Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major is chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Credit 5 hours. Prerequisite: Chemistry 106 or equivalent.

LEC	T1	TT	3	210	MANSFIELD
LAB	76	M	10 12	53	MANSFIELD
		WF	9 12	53	MANSFIELD
	76	TT	11	74	MANSFIELD

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:-Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	Q1	TT	12	204	BABLER
LAB	81	MWF	8 11	54	LOTHIAN
	81	TH	9	74	LOTHIAN
LAB	82	MWF	3 6	54	POTEMPA
	82	TU	3	74	POTEMPA
LAB	83	MWF	10 1	54	GOTTLIEB CARBON
	83	TU	10	75	GOTTLIEB

Chem. 123. QUANTITATIVE ANALYSIS FOR ENGINEERS:-A course in quantitative analysis designed for the needs of engineers, especially ceramic and metallurgical. Credit 5 hours. Prerequisite: Chemistry 104,105 or 109.

LEC	Q1	TT	12	210	GOTTLIEB
LAB	85	MWF	2 5	54	GOTTLIEB
	85	TH	3	74	GOTTLIEB

Chem. 124. QUANTITATIVE ANALYSIS:-For all students in the chemistry curriculum and chemical engineering. Credit 5 hours. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	T1	TT	3	204	BABLER
LAB	86	MWF	12 3	54	BABLER MILLER
	86	TU	1	75	BABLER

Chem. 132. ELEMENTARY ORGANIC CHEMISTRY:-This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum. Credit 3 hours. Prerequisite: Chemistry 101, 102, 109 or equivalent.

LEC	E1	WF	12	65	WELDON
LAB	90	TH	10 1	52	CARBONARO
	90	TU	10	74	CARBONARO

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:-To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	E1	WF	12	204	CRUM
	EX	M	12	204	
LAB	91	TT	9 12	52	CRUM
	91	M	9	75	CRUM
LAB	92	MW	2 5	52	CRUM
	92	F	2	74	CRUM
LAB	93	WF	9 12	52	HELLER
	93	M	10	75	HELLER

Chem. 234. ORGANIC CHEMISTRY:-For students whose major is chemistry, or for those registered in the curriculum in chemistry or chemical engineering. Credit 5 hours. Prerequisite: Chemistry 124.

LEC	R1	TT	1	210	BACHRACH
LAB	96	MW	9 12	52	BACHRACH
	96	F	10	80	BACHRACH

Chem. 247. ELEMENTARY PHYSICAL CHEMISTRY:-For premedical students and others not in chemistry and engineering curricula. Lectures and laboratory. Credit 4 hours. Prerequisite: Chemistry 122 and 133; Physics 102, or equivalent.

LEC	D1	MWF	11	210	SCHRAGE
LAB	98	TH	8 11	501	SCHRAGE

CIVIL ENGINEERING

C. E. 106. SURVEYING:-Topographic surveying; field astronomy; route surveying; stream gaging; introduction to photogrammetry. Credit 3 hours. Prerequisite: Civil Engineering 105; credit or registration in General Engineering 111.

LEC	M	TT	9		63
LAB	A	M	9	12	63
LAB	B	F	9	12	63

C. E. 160. BUILDING CONSTRUCTION:-Materials, types of construction, and details for buildings. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	G	MWF	2	63

C. E. 235. PLAIN CONCRETE:-Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning, field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions;calculations and graphs based on values from concrete proporting projects. Credit 2 hours. Prerequisite: Sophomore standing in engineering or architecture.

LAB	A	MW	10	12	61
LAB	B	TT	10	12	61

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:-An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. Credit 3 hours.

C1	MWF	10	22	GILLETT
D1	MWF	11	38	CRABB
F1	MWF	1	16	MURPHY
H1	MWF	3	17	MURPHY
J1	MWF	4	24	CRABB
M1	MTT	9	17	SELTZER
P1	MTT	11	16	SELTZER
R1	MTT	1	20	CRABB
T1	MTT	3	23	CRABB

Econ. 102. PRINCIPLES OF ECONOMICS:-An introduction to the major areas of modern economic theory and public policy--product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Credit 3 hours. Prerequisite: One year of college work.

B1	MWF	9	22 SHAW
D1	MWF	11	17 0 MILLER
G1	MWF	2	18 0 MILLER
G2	MWF	2	23 SHAW
N	MTT	10	17 0 MILLER

Econ. 103. PRINCIPLES OF ECONOMICS:-Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Credit 3 hours. Prerequisite: Economics 102.

C1	MWF	10	21 WILLIAMS
E1	MWF	12	16 WILLIAMS
G1	MWF	2	16 SELTZER
H1	MWF	3	16 SELTZER
R	MTT	1	18 0 MILLER

Econ. 108. ELEMENTS OF ECONOMICS:-A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Credit 3 hours. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	24 DUNNE
F1	MWF	1	24 DUNNE
G1	MWF	2	17 WILLIAMS
H1	MWF	3	19 KAUCKI
J1	MWF	4	23 WILLIAMS
P1	MTT	11	18 KAUCKI
Q1	MTT	12	18 KAUCKI

Econ. 136. AMERICAN ECONOMIC HISTORY:-Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Credit 3 hours. Open to freshmen and sophomores only.

C1	MWF	10	20	GELDARD
D1	MWF	11	19	SHAW
E1	MWF	12	22	GELDARD
E2	MWF	12	19	SHAW
G1	MWF	2	21	GELDARD
J1	MWF	4	19	KAUCKI
M	MTT	9	16	MURPHY
N1	MTT	10	16	MURPHY

Econ. 133. EUROPEAN ECONOMIC HISTORY:-The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations Credit 3 hours. Open to freshmen and sophomores only.

B1	MWF	9	20	GELDARD

Econ. 170. ELEMENTS OF STATISTICS:-Methods of collection--presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Credit 3 hours. Prerequisite: Economics 102 or 108; sophomore standing.

	B1	MW	9	33	LARSON
PRACT	1	F	9 11	33	LARSON
	D1	MW	11	33	LARSON
PRACT	2	F	11 1	33	LARSON
	G1	MW	2	33	LARSON
PRACT	3	F	2 4	33	LARSON
	Q	MT	12	33	JUNG
PRACT	4	TH	11 1	33	JUNG
	T1	MT	3	33	JUNG
PRACT	5	TH	2 4	33	JUNG

Ed. 101. NATURE OF THE TEACHING PROFESSION:-An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. Credit 2 hours.

M1	TT	9	28	RICHEY
P1	TT	11	28	RICKS
R1	TT	1	28	RICKS

Ed. 109. EDUCATIONAL PSYCHOLOGY:-The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Credit 3 hours. Prerequisite: Psychology 100.

N1	TTF	10	28	RICKS

Ed. 201. FOUNDATIONS OF AMERICAN EDUCATION:-A sutdy of contemporary American public education in the setting of current American Culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching professiong. Credit 2 hours. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

D1	WF	11	28	RICKS

ELECTRICAL ENGINEERING

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:-Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Credit 4 hours. Prerequisite: Physics 107 and Mathematics 143.

	D1	MWF	11	134
LAB	D		9 12	120
	H1	MWF	3	110
LAB	H	TH	3 6	120

English 101. INTRODUCTION TO POETRY:-Understanding of poetry through the reading and discussion of representative poems. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	215	FREYER
D1	MWF	11	214	F JOHNSON
G1	MWF	2	216	ATWOOD
M1	MTT	9	205	JACKMAN
T1	MTT	3	216	J JOHNSON

English 102. INTRODUCTION TO DRAMA:-Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	216	MACKIN
D1	MWF	11	216	GREENWALD
F1	MWF	1	216	BLUM
N1	MTT	10	214	S MILLER
U1	MTT	4	215	LOVE

English 103. INTRODUCTION TO FICTION:-Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's "Pride and Prejudice", Balzac's "Pere Goriot", Dostoevski's "Crime and Punishment", E. M. Fooster's "A Passage to India", and Hemingway's "A Farewell to Arms". Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	209	MCNAMARA
C1	MWF	10	209	KERWICK
F1	MWF	1	211	RUNYAN
J1	MWF	4	214	CRAWLEY
L1	MTT	8	209	LEONHARD
Q1	MTT	12	209	GRIEST
T1	MTT	3	209	NICHOLAS

English 113. AMERICAN LITERATURE:-Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

A 1	M W F	8	212	W R I G H T
G 1	M W F	2	212	J O R D A N
R 1	M T T	1	214	K A R A N I K A S

English 114. AMERICAN LITERATURE:-Classic American Authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B 1	M W F	9	212	W R I G H T
G 1	M W F	2	211	W I L L E T T
P	M T T	11	212	S T R O N K S

English 121. CHIEF ENGLISH WRITERS BEFORE 1800:-"Canterbury Tales", "Utopia", two plays by Shakespeare, "Paradise Lost", Gulliver's Travels", "Tom Jones", "Rasselas". This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

F 1	M W F	1	215	K O G A N

English 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:-Wordsworth, Byron, Carlyle's "Past and Present", Arnold's prose and poetry, Fitz-Gerald's "The Rubaiyat of Omar Khayyam", readings from T. H. Huxley, Browning's poems, and one novel. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B 1	M W F	9	215	I M I L L E R

English 123. CHIEF MODERN ENGLISH WRITERS:-Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others, Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E 1	M W F	12	215	W E I S S

English 131. INTRODUCTION TO SHAKESPEARE:-Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	215	VEST

FRENCH

French 101. ELEMENTARY COURSE:-Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	224	LEIN
B1	TWTF	9	226	COWLES
E1	TWTF	12	226	SKOGEN
H1	TWTF	3	226	MEYER
J1	TWTF	4	226	SKOGEN

French 102. ELEMENTARY COURSE:-Continuation of French 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	224	LEIN
C1	TWTF	10	226	COWLES
D1	TWTF	11	226	COWLES
E1	TWTF	12	228	LEIN
F1	TWTF	1	228	SKOGEN
H1	TWTF	3	228	SKOGEN

French 103. MODERN FRENCH:-Rapid reading of modern authors, syntax, and composition; some conversational practice. Credit 4 hours. Prerequisite: French 102 or two years of high school French.

C1	TWTF	10	224	LEIN
F1	TWTF	1	224	MEYER

French 104. MODERN FRENCH:-Continuation of French 103. Credit 4 hours. Prerequisite: French 103 or three years of high school French.

B1	TWTF	9	228	SCHUYLER
C1	TWTF	10	228	SCHUYLER
F1	TWTF	1	226	COWLES

French 202. Introduction to French Literature. Continuation of French 201. Credit 3 hours. Prerequisite: French 104 or four years of high school French.

D1	MWF	11	228	SCHUYLER

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:-Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Credit 3 hours. Prerequisite: Plane geometry.

A1	MWF	8 10	135
A2	MWF	8 10	136
B1	MWF	10 12	135
B2	MWF	10 12	136
C1	MWF	12 2	135
C2	MWF	12 2	136
D1	MWF	2 4	135
D2	MWF	2 4	136
F1	TT	8 11	135
F3	TT	8 11	137
G1	TT	11 2	135
G3	TT	11 2	137

G. E. 102. ENGINEERING GEOMETRY:-Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Credit 3 hours. Prerequisite: General Engineering 101.

A 3	M W F	8 10	137
A 4	M W F	8 10	141
A 5	M W F	8 10	143
B 3	M W F	10 12	137
B 4	M W F	10 12	141
B 5	M W F	10 12	143
B 7	M W F	10 12	146
C 3	M W F	12 2	137
C 4	M W F	12 2	141
C 5	M W F	12 2	143
D 3	M W F	2 4	137
D 4	M W F	2 4	141
D 5	M W F	2 4	143
F 4	T T	8 11	141
F 5	T T	8 11	143
F 6	T T	8 11	145
G 4	T T	11 2	141
G 5	T T	11 2	143
G 7	T T	11 2	146

G. E. 107. ARCHITECTURAL PROJECTIONS:-Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Credit 2 hours. Prerequisite: Plane geometry.

A 6	M W F	8 10	145
B 6	M W F	10 12	145
C 6	M W F	12 2	145

G. E. 108. ARCHITECTURAL PROJECTIONS:-Shades and shadows; oblique, isometric, and perspective drawings; developments. Credit 2 hours. Prerequisite: General Engineering 107.

A 7	MWF	8 10	146
C 7	MWF	12 2	146
D 7	MWF	2 4	146
F 7	TT	8 11	146

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:-Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

G 7	TT	11 2	146

G. E. 112. GENERAL ENGINEERING TECHNOLOGY:-For mechanical engineers. Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

F 2	TT	8 11	136
G 2	TT	12 2	136

G. E. 210. INDUSTRIAL PRODUCTION ILLUSTRATION:-Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. Credit 3 hours. Prerequisite: General Engineering 102, or 107 and 108.

D 6	MWF	2 4	145

G. E. 212. GRAPHICAL CALCULATIONS:-Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Credit 1 hour. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

N 2	TT	10	136
P 2	TT	11	136

Geog. 101. ELEMENTS OF GEOGRAPHY:-The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit.

LEC	N1	TT	10	218	FINNEY
	A1	MWF	8	13	FINNEY
	C1	MWF	10	13	FINNEY
	D1	MWF	11	13	HUNTER
	G1	MWF	2	13	HUNTER

Geog. 104. WORLD REGIONAL GEOGRAPHY:-Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

N1	TTF	10	14	COLBY
R1	MTT	1	14	COLBY

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:-Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

E1	MWF	12	13	FINNEY

Geog. 111. INTRODUCTORY METEOROLOGY:-The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Credit 3 hours. Prerequisite: Geography 101 or consent of instructor.

A1	MWF	8	14	RHEUMER
B1	MWF	9	13	RHEUMER
G1	MWF	2	14	RHEUMER

Geog. 114. CONSERVATION OF NATURAL RESOURCES:-Elements of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis given to the general principles of conservation as they apply to the United States. Credit 3 hours. Prerequisite: Sophomore standing.

D1	MWF	11		14	RHEUMER

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:-Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	204	KARPINSKI
LAB	1	TU	8 10	42	KURS
	1	TH	8	42	KURS
LAB	2	TH	10 12	42	KARPINSKI
	2	TU	11	42	KARPINSKI
LAB	3	W	1 3	42	DEMAR
	3	F	1	42	DEMAR
LAB	4	M	11 1	42	KURS
	4	W	12	42	KURS
LAB	5	F	2 4	42	KURS
	5	W	3	42	KURS

Geol. 102. HISTORICAL GEOLOGY:-Evolution of the earth and its life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 142.

LEC	H1	WF	3	210	DEMAR
LAB	11	W	10 12	42	DEMAR
	11	F	10	42	DEMAR
LAB	12	M	3 5	42	DEMAR
	12	TH	3	42	DEMAR

Geology 110. FIELD WORK:- Field observation in St. Francois Mountains and adjacent parts of Missouri and Illinois. (During spring vacation.) Two three-hour class meetings to be arranged. Credit is given only on completion of a satisfactory written report. Credit 2 hours. Prerequisite: Geology 101, 150, or Physical Science 102.

LAB	1	TO BE ARRANGED		STAFF

Geol. 132. MINERALOGY:-A systematic study of minerals and rocks. The geologic relationships of minerals and rocks are emphasized. The common silicate minerals and the important varieties of rocks are studied in the laboratory. Lecture and laboratory. Credit 4 hours. Prerequisite: Geology 131.

LAB	DIS	MWF	8 10	42	KURS

Geol. 150. GEOLOGY FOR ENGINEERS:-Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	D1	MW	11	204	KARPINSKI
LAB	21	M	1 3	42	KARPINSKI
LAB	22	TU	3 5	42	KARPINSKI

GERMAN

German 101. ELEMENTARY COURSE:-Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	220	HARTOCH
B1	TWTF	9	220	ROSMAN
C1	TWTF	10	220	ROSMAN
D1	TWTF	11	220	TEICHMANN
E1	TWTF	12	220	WILLNER
F1	TWTF	1	220	TEICHMANN
H1	TWTF	3	220	WILLNER

German 102. ELEMENTARY COURSE:-Continuation of German 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

B1	TWTF	9	221	KAUF
C1	TWTF	10	221	HARTOCH
D1	TWTF	11	221	BRAUNFELD
D2	TWTF	11	215	ROSMAN
E1	TWTF	12	221	TEICHMANN
F1	TWTF	1	221	ROSMAN
F2	TWTF	1	212	KAUF
H1	TWTF	3	221	BRAUNFELD

German 103. INTERMEDIATE COURSE:-Modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 102, two years of high school German, or equivalent.

C1	TWTF	10	222	KAUF
E1	TWTF	12	222	BRAUNFELD
F1	TWTF	1	222	BRAUNFELD

German 104. INTERMEDIATE COURSE:-Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 103, three years of high school German, or equivalent.

B1	TWTF	9	223	HARTOCH
D1	TWTF	11	223	KAUF
F1	TWTF	1	223	WILLNER
H1	TWTF	3	223	TEICHMANN

German 210. MASTERPIECES OF GERMAN LITERATURE:-Introduction to German literature, in subjects, forms, and ideals. Credit 3 hours. Prerequisite: Two years of college German, or equivalent.

D1	MWF	11	222	VARDAMAN

Hist. 112. HISTORY OF WESTERN CIVILIZATION FROM 1815 to the PRESENT:- Development of European nationalism, liberalism, and imperialism; World War; reconstruction. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	P1	TT	11	218	NICHOLSON
	F1	WF	1	37	GOODMAN
	G1	WF	2	37	GOODMAN
	R1	TT	1	82	NICHOLSON
	R2	TT	1	97	GOODMAN
	T1	TT	3	97	NICHOLSON
LEC	F1	MW	1	218	UNFER
	H1	MW	3	37	UNFER
	L1	TT	8	18	UNFER
	M1	TT	9	24	UNFER
	P1	TT	11	24	UNFER
	T1	TT	3	37	GOODMAN

Hist. 132. HISTORY OF ENGLAND FROM 1688 to the PRESENT:-A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1688 to the present. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	213	GOODMAN S JONES
	M1	TTF	9	37	GOODMAN
	N1	TTF	10	37	GOODMAN
	P1	MTT	11	37	S JONES
	R1	MTT	1	37	S JONES

Hist. 152. HISTORY OF THE UNITED STATES FROM 1865 to the PRESENT:- A century of national life and organization. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	C1	M	10	218	RIDDLE
	B1	MW	9	37	S JONES
	M1	TT	9	82	RIDDLE
	N1	TT	10	82	BILL
	N2	TT	10	97	S JONES
	P1	TT	11	97	BILL
	Q1	TT	12	37	UNFER

Hist. 182. THE ANCIENT WORLD:-Rome. Credit 3 hours. Prerequisite: Sophomore standing.

M1	TTF	9	97	NICHOLSON

HUMANITIES

Humanities 102. VALUES IN LITERATURE:-A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. Credit 4 hours. Prerequisite: Humanities 101.

B1	TWTF	9	206	KOGAN
C1	TWTF	10	206	KOGAN
H1	TWTF	3	227	BLUM
J	TWTF	4	212	JORDAN

Humanities 152. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit 4 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	TWTF	10	223	VARDAMAN
E1	TWTF	12	214	VARDAMAN
H1	TWTF	3	211	SCHILLER

Hygiene 101. PERSONAL AND ENVIRONMENTAL HYGIENE:-This course is an elective subject for credit as indicated. Students who expect to take Hygiene 110 should take Hygiene 104 instead of Hygiene 101. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

A	WF	8	229	STAFF
B	WF	9	229	STAFF
F	WF	1	229	STAFF
G	WF	2	229	STAFF
N	TT	10	229	STAFF
P	TT	11	229	STAFF
T	TT	3	229	STAFF
U	TT	4	229	STAFF

Hygiene 104. PERSONAL AND COMMUNITY HEALTH:-This course is an elective subject for credit as indicated. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others. who feel they will need this course in their future professional work. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

A	WF	8	229	STAFF
B	WF	9	229	STAFF
F	WF	1	229	STAFF
G	WF	2	229	STAFF
N	TT	10	229	STAFF
P	TT	11	229	STAFF
T	TT	3	229	STAFF
U	TT	4	229	STAFF

Hygiene 110. PUBLIC HEALTH:-Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P	TT	11	228	SPIES

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:-Organization plans, administrative policies, and management problems with special attention to manufacturing units. Credit 3 hours. Prerequisite: Economics 102, or 103, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	23	KNUDSON
D1	MWF	11	22	GILLETT
F1	MWF	1	22	GILLETT
G1	MWF	2	22	GILLETT
R	MTT	1	38	KNUDSON

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:-The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Credit 3 hours. Prerequisite: Economics 102, or 103, or consent of Associate Dean of the college; forty-five credit hours.

E1	MWF	12	23	KNUDSON
G1	MWF	2	19	JUNG
T1	MTT	3	21	KNUDSON

MATHEMATICS

Math. 101. BASIC MATHEMATICS:-A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. Credit 3 hours.

C1	MWF	10	94	PATRICELLI
G1	MWF	2	94	ZIOMEK

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:-Credit 3 hours. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MTWTF	8	94	KUZMANIC
A2	MTWTF	8	96	ZYGMUND
A3	MTWTF	8	100	PATRICELLI
A4	MTWTF	8	101	SJOBLOM

B1	MTWTF	9	96	LUMLEY
B2	MTWTF	9	100	VEDRAL
C1	MTWTF	10	96	KUZMANIC
C2	MTWTF	10	100	MURPHY
C3	MTWTF	10	103	REES
D1	MTWTF	11	96	SCHOLOMITI
D2	MTWTF	11	100	OLSEN
E1	MTWTF	12	96	SEARS
F1	MTWTF	1	106	ALBERTI
G1	MWF	2	104	BERGLUND
H1	MTWTF	3	100	PENNISI
H2	MTWTF	3	106	HENDERLEITER
H3	MWF	3	94	LINN
J1	MTWTF	4	94	ZIOMEK
J2	MTWTF	4	106	HENDERLEITER
J3	MTWTF	4	100	WILEY
M1	MTT	9	94	CURTIS
Q1	M	12	94	GORDON
	TT	12	113	

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:-This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. No credit.

D1	MWF	11	94	SEARS
N1	TT	10	110	NOLAN
	F	10	101	

Math. 110. FUNDAMENTALS OF MATHEMATICS:-For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Credit 4 hours. Prerequisite: Mathematics 109.

D1	MTWT	11	101	HARTLEY

Math. 112. COLLEGE ALGEBRA:-Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108. Sections marked * are open to Commerce students only.

B1	MWF	9	101	KUZMANIC
*B2	MWF	9	102	SJOBLOM
D1	MWF	11	102	PATRICELLI
*D2	MWF	11	144	SJOBLOM
*G1	MWF	2	102	LINN
G2	MWF	2	101	NOLAN
G3	MWF	2	103	WILEY
*J1	MWF	4	101	HILL
M1	MTT	9	103	PATRICELLI
N1	M	10	101	BALLARD
	TT	10	106	
N2	TT	10	111	BERGLUND
	F	10	102	
N3	M	10	102	SJOBLOM
	TT	10	113	
P1	TTF	11	103	BALLARD
P2	M	11	103	FEINSTEIN
	TT	11	38	
Q1	TTF	12	100	DINKINES
Q2	TT	12	103	CURTIS
	F	12	102	
R1	M	1	101	DINKINES
	TT	1	110	
R2	TT	1	94	FEINSTEIN
	F	1	102	
R3	MTT	1	100	LINN
T1	MTT	3	103	HILL
T2	TT	3	110	WILEY
	F	3	111	

Math. 114. PLANE TRIGONOMETRY:-Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	102	LUMLEY
M1	TT	9	101	REES
M2	TT	9	102	MURPHY
N1	TT	10	101	HARTLEY
N2	TT	10	102	ZYGMUND
N3	TT	10	94	OLSEN
P1	TT	11	94	ONDRAK
P2	TT	11	102	VEDRAL
Q1	TT	12	101	REES
Q2	TT	12	102	ZYGMUND
Q3	TT	12	94	VEDRAL
Q4	TT	12	106	HENDERLEITER
R1	TT	1	101	ONDRAK
R2	TT	1	102	SCHOLOMITI
R3	TT	1	103	OLSEN
R4	TT	1	104	HENDERLEITER
T1	TT	3	111	LARIVIERE
T2	TT	3	102	SCHOLOMITI
U1	TT	4	111	LARIVIERE

Math. 123. ANALYTIC GEOMETRY:-Plane and solid analytic geometry. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, and 114.

A1	MTWTF	8	105	REES
A2	MTWTF	8	104	VEDRAL
B1	MTWTF	9	104	ZYGMUND
B2	MTWTF	9	105	OLSEN
C1	MTWTF	10	104	SEARS
C2	MTWTF	10	105	ONDRAK
D1	MTWTF	11	106	FRANK

D2	MTWTF	11	105	NOLAN
E1	MTWTF	12	104	HILL
E2	MTWTF	12	105	LINN
F1	MTWTF	1	111	LARIVIERE
F2	MTWTF	1	105	GORDON
H1	MTWTF	3	104	ZIOMEK
H2	MTWTF	3	105	ALBERTI

Math. 133. CALCULUS:-First course for students of mathematics and engineering. Credit 3 hours. Prerequisite: Mathematics 122 or 123.

A1	MWF	8	106	BALLARD
B1	MWF	9	106	BALLARD
B2	MWF	9	80	FEINSTEIN
C1	MWF	10	111	FEINSTEIN
D1	MWF	11	80	CURTIS
D2	MWF	11	76	DINKINES
E1	MWF	12	106	WILEY
F1	MWF	1	94	HILL
F2	MWF	1	104	NOLAN
G1	MWF	2	111	ALBERTI
G2	MWF	2	105	PENNISI

Math. 143. CALCULUS:-Second course for students of mathematics and engineering. Credit 5 hours. Prerequisite: Mathematics 133.

A1	MTWTF	8	111	SCHOLOMITI
B1	MTWTF	9	111	ONDRAK
D1	MTWTF	11	111	BERGLUND
D2	MTWTF	11	104	MURPHY
E1	MTWTF	12	111	LARIVIERE
H1	MTWTF	3	101	GORDON

Math. 161. STATISTICS:-Credit 3 hours. Prerequisite: Mathematics 111 or 112; sophomore standing.

F1	MWF	1	103	BERGLUND

Math. 343. ADVANCED CALCULUS:-Credit 3 hours.

E1	MWF	12	103	PENNISI

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS:-Credit 3 hours. Prerequisite: Mathematics 133 and 143, or 137 and 147.

A1	MWF	8	103	CURTIS
C1	MWF	10	106	FRANK
G1	MWF	2	106	DINKINES

MECHANICAL ENGINEERING

M. E. 182. MANUFACTURING PROCESSES:-Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Credit 3 hours. Prerequisite: General Engineering 101, sophomore standing.

B1	MWF	9	65

M. E. 183. MATERIALS CASTING:-Casting as a process of fabrication; the molding process including machine moulding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Credit 3 hours. Prerequisite: General Engineering 101; sophomore standing.

LEC	C	MF	10	65
LEC	F	MF	1	65
LAB	A	TU	8 11	71
LAB	B	W	11 2	71
LAB	C	W	2 5	71

M. E. 184. METAL PROCESSING:-Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Credit 3 hours. Prerequisite: General Engineering 101; sophomore standing.

LEC	M	TT	9	65
LEC	P	TT	11	65
LAB	A	M	11 2	64
LAB	B	W	11 2	64
LAB	C	F	2 5	64

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:-Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles, and processes involving transfers of mass and energy. Basic laws of heat transfer. Credit 3 hours. Prerequisite: Physics 108; Mathematics 142 or 143.

G1	MW	2	65
	F	2 4	65

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. FRESHMAN BASIC DRILL AND THEORY:-Basic military instruction to include: American military history, and leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 101 or equivalent.

THEORY	1	MW	9	116 ONEILL
THEORY	2	TT	9	116 CLAMPITT
THEORY	3	MW	10	116 ONEILL
THEORY	4	TT	10	116 CLAMPITT
THEORY	5	MW	11	116 ONEILL
THEORY	6	TT	11	116 CLAMPITT
DRILL	1	TU	8	EAST END AUDITORIUM
DRILL	2	W	8	EAST END AUDITORIUM
DRILL	3	TH	8	EAST END AUDITORIUM
DRILL	4	F	8	EAST END AUDITORIUM

Mil. Sci. 104. SOPHOMORE BASIC DRILL AND THEORY:-Basic military instruction to include: Crew-served weapons and gunnery; Basic tactics; and Leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 103 or equivalent.

THEORY	1	MW	9	230 MCCLENAHAN
THEORY	2	TT	9	230 MCCLENAHAN
THEORY	3	MW	11	230 MCCLENAHAN
THEORY	4	TT	10	230 MCCLENAHAN
DRILL	1	TU	8	EAST END AUDITORIUM
DRILL	2	W	8	EAST END AUDITORIUM
DRILL	3	TH	8	EAST END AUDITORIUM
DRILL	4	F	8	EAST END AUDITORIUM

Mil. Sci. 206. JUNIOR ADVANCED INFANTRY DRILL AND THEORY:-Advanced military instruction to include: Maps and aerial photographs; Patrolling; ROCID Organization; Tactics of the Infantry Division Battle Group, Rifle Company, Rifle Platoon and Weapons Platoon; and Leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 205, or Military Science 103 and 104, successful completion of Armed Forces Qualification test, officer-type physical examination and approval of Military Science department.

THEORY	X	MTWT	12	230 CHAMBERS
DRILL	1	TU	8	EAST END AUDITORIUM
DRILL	2	W	8	EAST END AUDITORIUM
DRILL	3	TH	8	EAST END AUDITORIUM
DRILL	4	F	8	EAST END AUDITORIUM

Music 100. RUDIMENTS OF THEORY:-Credit 2 hours.

D1	MWF	1	354	FISSINGER

Music 131. INTRODUCTION TO THE ART OF MUSIC, II.:-Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only. Credit 3 hours.

C1	MWF	10	354	FISSINGER

Music 150. MUSIC ENSEMBLE:-Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Credit ½ hour.

* A	TT	2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
** C	TT	11	354	FISSINGER
	F	3 5	354	

* Band rehearsals often continue for a part or all of the three o'clock hour for students able to arrange their schedule to permit this, but while attendance during the three o'clock hour is desired, it is not required.

** Students unable to arrange to attend chorus meetings on all days may still participate with the consent of the director. To earn credit, attendance on two days is required.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:-Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form and approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

C1	MWF	10	97	PAGE
E1	MWF	12	97	PAGE
F1	MWF	1	97	MORRIS

Phil. 102. LOGIC:-Reasoning, detection of fallacies, evidence. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	82	PAGE
D1	MWF	11	97	MORRIS
G1	MWF	2	82	MORRIS
	TT	12	22	MORRIS
	TU	11	22	

Phil. 105. MORAL IDEAS AND PRACTICE:-Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Q1	TT	12	24	PAGE
R1	TT	1	24	PAGE

PHYSICAL EDUCATION FOR MEN

* Classes will meet for 1½ hours.
** Classes will meet for 1½ hours; students will be released early to participate in extra-curricular activities.
*** Special conditioning sections.
**** Adaptive only.

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES- Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively. Credit 1 hour.

	C	MWF	10	GYM RADER
	D	MWF	11	GYM VERSEN
	E	MWF	12	GYM KRISTUFEK
	F	MWF	1	GYM KRISTUFEK

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. Credit 1 hour.

***	A	MWF	8	GYM MILLER
	B	MWF	9	GYM SPRINGER
	C	MWF	10	GYM GEDVILAS
	D	MWF	11	GYM NEMOTO
	E	MWF	12	GYM STRNAD
	F	MWF	1	GYM SPRINGER
	G	MWF	2	GYM BOSNAK
***	H	MWF	3	GYM MONTCALM

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

*LM	TT	8	LEWIS TOWERS	KRISTUFEK

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Students must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

*MN	TT	9	LEWIS TOWERS	KRISTUFEK

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

B	MWF	9	GYM	MILLER
C	MWF	10	GYM	FORDHAM
D	MWF	11	GYM	MILLER
F	MWF	1	GYM	ANDERSON
G	MWF	2	GYM	MONTCALM
*NP	TT	10	GYM	SPRINGER
*PQ	TT	11	GYM	ANDERSON

P. E. M. 113. DOUBLE TUMBLING STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

E	MWF	12	GYM	BOSNAK

P. E. M. 114. APPARATUS STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	SPRINGER
D	MWF	11	GYM	MONTCALM
E	MWF	12	GYM	MONTCALM
F	MWF	1	GYM	MONTCALM
H	MWF	3	GYM	BOSNAK
*QR	TT	12	GYM	MONTCALM
**RS	TT	1	GYM	MONTCALM

P. E. M. 117. BOXING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	NEMOTO
D	MWF	11	GYM	KRISTUFEK
E	MWF	12	GYM	NEMOTO
F	MWF	1	GYM	STRNAD
H	MWF	3	GYM	STRNAD
*QR	TT	12	GYM	KRISTUFEK

P. E. M. 118. WRESTLING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	KRISTUFEK
D	MWF	11	GYM	ANDERSON
E	MWF	12	GYM	MANN
F	MWF	1	GYM	MANN
G	MWF	2	GYM	MANN
*NP	TT	10	GYM	ANDERSON
*PQ	TT	11	GYM	MANN
*QR	TT	12	GYM	VERSEN
**RS	TT	1	GYM	SPRINGER

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

A	MWF	8	GYM	RADER
H	MWF	3	GYM	ANDERSON
* MN	TT	9	GYM	STRNAD

P. E. M. 123. WEIGHT LIFTING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

A	MWF	8	GYM	NEMOTO
B	MWF	9	GYM	RADER
C	MWF	10	GYM	MILLER
D	MWF	11	GYM	SPRINGER
E	MWF	12	GYM	RADER
F	MWF	1	GYM	VERSEN
G	MWF	2	GYM	ANDERSON
* LM	TT	8	GYM	STRNAD
* PQ	TT	11	GYM	NEMOTO
** RS	TT	1	GYM	BOSNAK

P. E. M. 129. VOLLEYBALL:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

**** A	MWF	8	GYM	SPRINGER
**** B	MWF	9	GYM	FORDHAM
* LM	TT	8	GYM	RADER
* MN	TT	9	GYM	NEMOTO
* NP	TT	10	GYM	BOSNAK
* PQ	TT	11	GYM	STRNAD
* QR	TT	12	GYM	MANN
** RS	TT	1	GYM	FORDHAM

P. E. M. 130. BASKETBALL:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

D	MWF	11	GYM	GEDVILAS
E	MWF	12	GYM	VERSEN
F	MWF	1	GYM	BOSNAK

P. E. M. 132. ARCHERY:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

*PQ	TT	11	GYM RADER

P. E. M. 136. BADMINTON:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

*LM	TT	8	GYM ANDERSON
*MN	TT	9	GYM MILLER
*NP	TT	10	GYM NEMOTO
*PQ	TT	11	GYM BOSNAK
*QR	TT	12	GYM FORDHAM
**RS	TT	1	GYM MANN

P. E. M. 139. BACKYARD SPORTS:-Skills, knowledge, and conditions. Credit 1 hour.

**** G	MWF	2	GYM STRNAD
**** H	MWF	3	GYM MANN
* NP	TT	11	GYM BERRAFATO
** RS	TT	1	GYM VERSEN

P. E. M. 140. BOATING AND FISHING:-Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

* NP	TT	11	GYM RADER
* QR	TT	12	GYM GEDVILAS

P. E. M. 142. BALLROOM DANCE:-Credit 1 hour.

G MWF 2 AUD THOMAS

P. E. M. 150. PROFESSIONAL ORIENTATION:-Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. Credit 2 hours.

D WF 11 21 FORDHAM

P. E. M. 151. BEGINNING BASKETBALL:-Introductory skills, rules and strategy. For physical education majors. Credit 2 hours.

*A MTWTF 8 10 GYM GEDVILAS

P. E. M. 152. BEGINNING FOOTBALL:-Introductory skills, rules and strategy. For physical education majors. Credit 2 hours.

*A MTWTF 8 10 GYM VERSEN

RECREATION

Recreation 170. OUTDOOR RECREATIONAL SPORTS:-Soccer, touch football, volleyball, softball, speedball. Credit 2 hours.

*A MTWTF 8 10 GYM BERRAFATO

Recreation 171. INDOOR RECREATIONAL SPORTS:-Badminton, handball, paddle tennis, squash racquets, table tennis, weight lifting. Credit 2 hours.

*A MTWTF 8 10 GYM BERRAFATO

Recreation 174. CAMP COUNSELING:-Objectives, administration, techniques, activity programs, evaluation. Credit 3 hours.

E	MWF	12	18	GEDVILAS

Recreation 176. PRINCIPLES OF RECREATION:-History of leisure and recreation; concepts of play and recreation; major recreation agencies. Credit 3 hours.

D	M	11	GYM	BERRAFATO
	WF	11	101	

PHYSICAL EDUCATION FOR WOMEN

P. E. W. 100. CONDITIONING ACTIVITIES:-Credit 1 hour.

E	MWF	12	AUDIT.	THOMAS
F 1	MWF	1	AUDIT.	THOMAS
F 2	MWF	1	AUDIT.	ANZALONE
* MN	TT	9	AUDIT.	THOMAS
* N P	TT	10	AUDIT.	THOMAS

P. E. W. 102. MODIFIED ACTIVITIES:-Prescribed recreational sports, relaxation, and exercise. Credit 1 hour. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUDIT.	ANZALONE

P. E. W. 105. ELEMENTARY RHYTHMS:-Beginning dance techniques. Credit 1 hour.

	B	MWF	9	AUDIT.	CLAYPOOLE
	C	MWF	10	AUDIT.	CLAYPOOLE
	D	MWF	11	AUDIT.	CLAYPOOLE
*	NP	TT	10	AUDIT.	CLAYPOOLE
*	QR	TT	12	AUDIT.	CLAYPOOLE

P. E. W. 105. INTERMEDIATE RHYTHMS:-Intermediate dance techniques, solo and group dance compositions. Credit 1 hour. Prerequisite: Physical Education for Women 105 or consent of instructor.

*	MN	TT	9	AUDIT.	CLAYPOOLE

P. E. W. 123. BASKETBALL:-Credit 1 hour.

**	RS	TT	1	AUDIT.	ANZALONE

P. E. W. 124. VOLLEYBALL:-Credit 1 hour.

	D	MWF	11	AUDIT.	ANZALONE

P. E. W. 125. SOFTBALL:-Credit 1 hour.

*	TU	TT	3	AUDIT.	THOMAS

P. E. W. 130. BADMINTON:-Personal equipment to be furnished by student.. Credit 1 hour.

G MWF 2 AUDIT. ANZALONE

P. E. W. 131. GOLF:-Personal equipment to be furnished by student. Credit 1 hour.

*PQ TT 11 AUDIT. PESAVENTO

P. E. W. 132. BOWLING:-Credit 1 hour.

** RS TT 1 ABBOTT HALL THOMAS

P. E. W. 134. TENNIS:-Personal equipment to be furnished by student. Credit 1 hour.

*QR TT 12 AUDIT. ANZALONE

P. E. W. 142. BALLROOM DANCE:-Credit 1 hour.

G MWF 2 AUDIT. THOMAS

P. E. W. 152. BASKETBALL AND SOFTBALL:-Credit 1 hour. For Physical Education majors.

C MTWTF 10 AUDIT. PESAVENTO

P. E. W. 154. TUMBLING, APPARATUS AND TENNIS:-Credit 2 hours. For Physical Education majors.

B	MTWTF	9	AUDIT.	PESAVENTO	

Dance 160. BEGINNING CONTEMPORARY DANCE:-Credit 2 hours. For Physical Education majors.

F	MTWTF	1	AUDIT.	CLAYPOOLE	

Dance 230. FOLK DANCE:-Credit 1 hour. For Physical Education majors.

E	MWF	12	AUDIT.	BARTON	

PHYSICAL SCIENCE

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:-A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in general chemistry, physics, or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	B1	WF	9	204	MELOY	
LAB	1	W	10 1	85	R	MILLER
	1	F	10	74	R	MILLER
LAB	2	W	2 5	85	R	MILLER
	2	M	3	74	R	MILLER
LAB	3	TH	9 12	85	R	MILLER
	3	TU	9	74	R	MILLER

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:-A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in general chemistry, physics, or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101.

LEC	M1	TT	9	204	MELOY
LAB	11	F	9 12	85	COWIN
	11	W	10	74	COWIN
LAB	12	F	1 4	85	MELOY
	12	M	2	75	MELOY
LAB	13	M	9 12	85	DEMAR
	13	F	11	74	DEMAR
LAB	14	M	2 5	85	COWIN
	14	W	3	74	COWIN
LAB	15	TU	10 1	85	COWIN
	15	TH	10	74	COWIN

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):-Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Mathematics 114 or 117.

LEC	Y	TU	1	127
LEC	X	TU	11	127
	C1	MWF	10	134
LAB	C	TH	8 11	117
	E1	MWF	12	134
LAB	E	TH	11 2	117
	F1	MWF	1	134
LAB	F	TU	3 6	117
	H1	MWF	3	134
LAB	H	TH	3 6	117

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS:-Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Physics 101.

LEC	Y	TH	1	127
LEC	X	TH	11	127
	B1	MWF	9	134
LAB	B	TU	8 11	124
	C1	MWF	10	113
LAB	C	TU	11 2	124
	G1	MWF	2	134
LAB	G	TU	3 6	124
	J1	MWF	4	134
LAB	J	TH	3 6	124
LEC	X	M	10	127
LEC	Y	M	12	127

Physics 105. GENERAL PHYSICS (MECHANICS):-Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Credit or registration in Mathematics 133.

LEC	Z	M	2	127
	C1	WF	10	144
LAB	C	TH	8 11	123
	E1	WF	12	144
LAB	E	TH	11 2	123
	L1	TT	8	134
LAB	L	W	8 11	123
	M1	TT	9	134
LAB	M	F	8 11	123
	N1	TT	10	134
LAB	N	W	12 3	123

	P1	TT	11	134
LAB	P	M	3 6	123
	Q1	TT	12	134
LAB	Q	F	12 3	123
	R1	TT	1	134
LAB	R	F	3 6	123
	T1	TT	3	134
LAB	T	W	3 6	123

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):- Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 105; credit or registration in Mathematics 143.

LEC	X	W	10	127
LEC	Y	W	1	127
	L1	TT	8	113
LAB	L	F	8 11	124
	M1	TT	9	144
LAB	M	F	8 11	124
	N1	TT	10	144
LAB	N	M	8 11	124
	E1	MF	12	113
LAB	E	TH	11 2	124
	F1	MF	1	144
LAB	F	TU	11 2	124
	G1	MF	2	113
LAB	G	TU	3 6	124
	H1	MF	3	113
LAB	H	TH	3 6	124

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS):-Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	F	10	127
LEC	Y	F	1	127
	A1	MW	8	134
LAB	A	TU	8 11	122
	B1	MW	9	113
LAB	B	TH	8 11	122
	E1	MW	12	110
LAB	E	TU	11 2	122
	Q1	TT	12	110
LAB	Q	W	12 3	122
	R1	TT	1	144
LAB	R	W	3 6	122
	T1	TT	3	113
LAB	T	M	3 6	122

Physics 341. ELECTRICITY AND MAGNETISM:-Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Credit 4 hours. Prerequisite: General physics and calculus.

	G1	MWF	2	208
LAB	G	TH	3 6	208

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:-A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. Credit 3 hours.

E1 MWF 12 37 GABIS

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:-This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. Credit 3 hours.

F1	MWF	1	80	BARBER

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:-Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	28	BARBER
C1	M	10	14	GABIS
	WF	10	23	
E1	MWF	12	82	BARBER
H1	MWF	3	82	BARBER
Q	TT	12	21	GABIS
	TU	1	21	
T1	TT	3	20	GABIS
	TH	4	20	

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:-Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Credit 3 hours. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

F1	MWF	1	13	GABIS

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:-Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Credit 4 hours. Prerequisite: Second semester freshman standing.

LEC	B1	WF	9	218	HOWARD
	C1	WF	10	16	HOWARD
	D1	WF	11	16	V LIPMAN
	M1	TT	9	19	HOWARD
	N1	TT	10	19	V LIPMAN

	P1	TT	11	19	V LIPMAN
LEC	Q1	TT	12	213	E LIPMAN
	E1	WF	12	18	V LIPMAN
	F1	WF	1	28	TYROLER
	G1	WF	2	28	TYROLER
	R1	TT	1	16	V LIPMAN
	T1	TT	3	16	V LIPMAN

Psych. 135. STATISTICAL METHODS IN PSYCHOLOGY:-Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. Credit 3 hours. Prerequisite: Psychology 100.

B1	MWF	9	76	EELLS

Psych. 145. INDUSTRIAL PSYCHOLOGY:-A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Credit is not given for both Psych. 145 and Psych. 245 at Urbana. Credit 3 hours. Prerequisite: Psychology 100.

A1	MWF	8	28	HOWARD
E1	MWF	12	28	HOWARD

Psych. 150. PERSONALITY AND HUMAN RELATIONS:-An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Credit 3 hours. Prerequisite: Psychology 100 or equivalent.

LEC	C1	WF	10	218	E LIPMAN
	B1	M	9	14	TYROLER
	D1	M	11	28	TYROLER
	N1	TU	10	20	E LIPMAN

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Intensive review of fundamentals, with considerable practice in composition. Open to students who fail the placement test for admission to Rhetoric 101. Students passing this course will be admitted to Rhetoric 101 without further examination. Admission to sections marked * requires consent of the Division of Humanities. No credit.

A1	MWF	8	202	KENNY
B1	MWF	9	202	KENNY
C1	MWF	10	202	KENNY
D1	MWF	11	205	CARLSON
* D2	MTWTF	11	201	KIRSTEIN HOSKIN
E1	MWF	12	202	KENNY
* E2	MTWTF	12	201	KIRSTEIN HOSKIN
F1	MWF	1	202	CARLSON
G1	MWF	2	202	HEGIE
H1	MWF	3	202	HEGIE
M1	MTT	9	201	S MILLER
N1	MTT	10	203	LEONHARD
Q1	MTT	12	203	LEONHARD
R	M	1	225	
	TT		209	S MILLER

Rhetoric 101. FRESHMAN RHETORIC AND COMPOSITION:-This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

A1	MWF	8	201	I MILLER
A2	MWF	8	203	STAR
B1	MWF	9	211	FREYER
B2	MWF	9	214	DAVIS
B3	M	9	225	
	WF		201	STAR
C1	MWF	10	201	I MILLER

N 1	M	10	206	
	T T		202	JACKMAN
N 2	M T T	10	216	KARANIKAS
P 1	M	11	220	
	T T		202	J JOHNSON
Q 1	M T T	12	212	KARANIKAS
Q 1	M	12	220	
	T T		202	MUNRO
R 1	M	1	212	
	T T		215	J JOHNSON
R	M	1	222	
	T T		211	TIMMIS
T 1	M T T	3	222	TIMMIS
U 1	M T T	4	202	J JOHNSON
U 2	M T T	4	203	BLUM

Rhetoric 102. FRESHMAN RHETORIC AND COMPOSITION:-This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A 1	M W F	8	222	MCNAMARA
A 2	M W F	8	219	DAVIS
B 1	M W F	9	216	MACKIN
B 2	M W F	9	222	GREENWALD
B 3	M	9	228	
	W F		219	VEST
C 1	M W F	10	229	MACKIN
C 2	M	10	221	
	W F		203	ATWOOD
C 3	M	10	226	
	W F		214	WRIGHT

C2	MWF	10	211	JOHNSON F
C3	MWF	10	212	FREYER
C4	MWF	10	229	CASSELL
D1	MWF	11	211	WILLETT
D2	MWF	11	224	MCNAMARA
D3	MWF	11	229	HEGIE
D4	M	11	215	
	WF		206	ATWOOD
E1	MWF	12	205	I MILLER
E2	MWF	12	206	STAR
E3	MWF	12	211	KERWICK
E4	MWF	12	229	HIPPLE
F1	MWF	1	201	HEGIE
F2	MWF	1	203	KOGAN
F3	M	1	223	
	WF		214	GREENWALD
G1	MWF	2	201	WEISS
G2	MWF	2	203	GREENWALD
G3	MWF	2	227	HIPPLE
G4	MWF	2	209	KERWICK
H1	MWF	3	201	JORDAN
H2	MWF	3	203	HIPPLE
H3	MWF	3	205	HELMER
H4	MWF	3	206	KERWICK
H5	MWF	3	212	WEISS
H6	MWF	3	214	WILLETT
J1	MWF	4	201	COX
J2	MWF	4	211	CASSELL
L1	MTT	8	23	RICHEY
L2	MTT	8	223	NICHOLAS
M1	M	9	224	
	TT		202	KARANIKAS

C4	M	10	227	
	WF		216	STAR
D1	M	11	221	
	WF		209	CRAWLEY
D2	M	11	223	
	WF		212	JORDAN
D3	M	11	226	
	WF		217	DAVIS
D4	MWF	11	202	WEISS
E1	MWF	12	224	MACKIN
E2	M	12	214	
	WF		203	WRIGHT
E3	M	12	222	
	WF		217	COX
E4	M	12	221	
	WF		212	CASSELL
E5	MWF	12	223	HELMER
F1	MWF	1	209	CRAWLEY
F2	MWF	1	227	WILLETT
F3	MWF	1	206	MCNAMARA
F4	MWF	1	96	DAVIS
G1	MWF	2	214	CRAWLEY
G2	MWF	2	220	COX
G3	MWF	2	221	CARLSON
G4	MWF	2	223	SCHILLER
G5	MWF	2	224	HELMER
G6	MWF	2	226	CASSELL
G7	MWF	2	222	RUNYAN
H1	MWF	3	219	RUDIN
H2	MWF	3	224	CARLSON
H3	MWF	3	229	CASSELL
H4	MWF	3	96	RUNYAN

H5	M	3	211
	WF		209 ATWOOD
J	MWF	4	205 HELMER
J2	MWF	4	229 HIPPLE
L1	MTT	8	206 MUNRO
L2	MTT	8	211 S MILLER
M1	M	9	220
	TT		203 STRONKS
M2	M	9	221
	TT		209 NICHOLAS
N1	M	10	222
	TT		205 MUNRO
N2	M	10	223
	TT		209 KIRSTEIN
N3	M	10	224
	TT		212 STRONKS
P1	M	11	227
	TT		203 TIMMIS
P2	MTT	11	206 LOVE
P3	MTT	11	209 LEONHARD
Q1	M	12	225
	TT		211 GRIEST
Q2	M	12	227
	TT		215 RICHEY
R1	M	1	221
	TT		202 RICHEY
R2	M	1	228
	TT		203 LOVE
R3	M	1	224
	TT		205 GRIEST
T1	M	3	221
	TT		202 GRIEST

U1	MTT	4	206	TIMMIS
U2	MTT	4	209	GRIEST

Rhetoric 133. PRINCIPLES OF COMPOSITION:-Practice in exposition, with emphasis on organization, paragraphing, and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit 3 hours. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 101 and Rhetoric 102; sophomore standing.

E1	MWF	12	216	FREYER

Rhetoric 143. INTERMEDIATE EXPOSITORY WRITING:-Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit 3 hours. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

G1	MWF	2	215	RUDIN

Rhetoric 144. NARRATIVE WRITING:-Practice in description, narrative sketches, stories. Credit 3 hours. Prerequisite: Rhetoric 101 and 102; sophomore standing.

E1	M	12	228	
	WF		209	SCHILLER

Rhetoric 151. BUSINESS LETTER WRITING:-Credit 3 hours. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

B1	M	9	206	
	WF		205	OLEKSY
C1	MWF	10	205	OLEKSY
F1	MWF	1	205	OLEKSY
G1	MWF	2	205	OLEKSY
P1	M	11	75	
	TT		205	MUNRO

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:-A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	WF	2	218	BOLTON
	N1	TT	10	18	CORLEY
	R1	TT	1	19	CORLEY
	T1	TT	3	19	BOLTON

Soc. Sci. 112. BASES OF AMERICAN LIFE:-A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	218	BILL
	C1	MWF	10	82	BILL
	F1	MWF	1	82	BILL
	P1	MTT	11	82	RIDDLE

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:-A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	M	9	218	COLBY
	M1	TTF	9	14	COLBY
	Q1	MTT	12	14	COLBY

Soc. Sci. 116. FAMILY LIVING:-The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Credit 4 hours. Prerequisite: Sophomore standing or consent of instructor.

LEC	D1	WF	11	218	STAFF
	B1	WF	9	16	KLASSEN
	C1	MW	10	28	PICKETT
	P1	TT	11	17	E LIPMAN

SOCIOLOGY AND ANTHROPOLOGY

SOCIOLOGY

Sociol. 100. INTRODUCTION TO SOCIOLOGY:-Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	24	CORLEY
G1	MWF	2	97	KLASSEN
H1	MWF	3	97	KLASSEN
P1	TT	11	23	CORLEY
	TH	12	23	

Sociol. 140. SOCIAL CONTROL:-The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

C1	MW	10	37	CORLEY
	F	10	17	

Sociol. 276. SOCIOLOGY OF THE CITY:-Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	80	KLASSEN

ANTHROPOLOGY

Anthrop. 103. INTRODUCTION TO ANTHROPOLOGY: THE GROWTH OF CULTURE:-An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. Credit 3 hours.

Q1	TU	12	17	WARREN
	TT	1	17	
U1	MTT	4	17	WARREN

SPANISH

Spanish 101. ELEMENTARY SPANISH:-For students who have no credit in Spanish. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

A1	TWTF	8	227	PATLOGAN
D1	TWTF	11	227	PATLOGAN
F1	TWTF	1	225	MARSH
H1	TWTF	3	225	TORT

Spanish 102. ELEMENTARY SPANISH:-Continuation of Spanish 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

B1	TWTF	9	225	SANCHEZ
C1	TWTF	10	227	MARSH
E1	TWTF	12	227	PATLOGAN

Spanish 103. INTERMEDIATE SPANISH:-Rapid reading, review of grammar, composition, conversation. Credit 4 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

C1	TWTF	10	225	SANCHEZ
J1	TWTF	4	225	TORT

Spanish 104. INTERMEDIATE SPANISH:-Continuation of Spanish 103. Credit 4 hours. Prerequisite: Spanish 103 or three years of high school Spanish.

B1	TWTF	9	227	PATLOGAN
E1	TWTF	12	225	MARSH

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:-Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Credit 2 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

G1	WF	2	225	MARSH

Spanish 202. INTRODUCTION TO SPANISH LITERATURE:-Reading of modern authors of Spain and Spanish America. Credit 3 hours. Prerequisite: Spanish 201 or consent of instructor.

D1	MWF	11	225	SANCHEZ

SPEECH

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign accents, may register for this course at the Student Counseling Service, Room 303, in advance of the dates specified. No credit. Prerequisite: Consent of the instructor.
Dates: Sections N1 and A1--February 18-April 3.
Sections N2 and A2--April 10-May 27.

N1	TT	10	201	HOSKINS
N2	TT	10	201	HOSKINS
A1	MW	8	217	HOSKINS
A2	MW	8	217	HOSKINS

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:-Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

B1	MWF	9	217 HOVDE
C1	MWF	10	217 HOVDE
C2	MWF	10	219 PITT
D1	MWF	11	219 HOVDE
E1	MWF	12	219 PITT
F1	MWF	1	219 HOVDE
F2	MWF	1	217 PITT
G1	MWF	2	217 HOSKINS
G2	MWF	2	219 CREWS
H1	MWF	3	217 WENZEL
H2	MWF	3	215 CREWS
J1	MWF	4	219 CREWS
M1	MTT	9	219 THOMPSON
M2	MTT	9	227 PITT
N1	M	10	220
	TT		219 THOMPSON
P1	MTT	11	217 GOULSON
Q1	MTT	12	217 ARMOLD
R1	M	1	220
	TT		217 ARMOLD
T1	M	3	220
	TT		217 ARMOLD

Speech 105. VOICE AND ARTICULATION:-A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

B1	MWF	9	203 HOSKINS
D1	MWF	11	203 RIGLER

Speech 107. PARLIAMENTARY PROCEDURE:-Principles and practice of parliamentary procedure. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

P1	TT	11	219	THOMPSON

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:-Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

N1	TT	10	215	PITT

Speech 141. ORAL INTERPRETATION OF LITERATURE:-Principles of interpretation, analysis, and oral reading of prose literature and verse. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	217	GOULSON
Q1	TT	12	219	CREWS
T1	TT	3	219	CREWS

Speech 161. FUNDAMENTALS OF ACTING:-A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Credit 3 hours. Prerequisite: Speech 141.

R1	M	1	226	
	TT		216	GOULSON

Speech 164. RADIO SPEAKING:-Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion; microphone experience. Credit 2 hours. Prerequisite: Consent of instructor.

M1	TT	9 11	451	ARMOLD

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):-Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic states, forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. Credit 2 hours. Prerequisite: Registration in Mathematics 143.

R1	TT	1	113

T. A. M. 151. ANALYTICAL MECHANICS (STATICS):-Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Credit 3 hours. Prerequisite: Registration in Math. 143.

C1	MWF	10	110
F1	MWF	1	110

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):-A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. Credit 4 hours. Prerequisite: Registration in Mathematics 143.

B1	MWF	9	144
	TH	9	110
J1	MTWF	4	113

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):-A combination of Theoretical and Applied Mechanics 150 and 211. Credit 5 hours. Prerequisite: Registration in Mathematics 143.

D1	MTWTF	11	113

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):-Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.;forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Credit 3 hours. Prerequisite: Mathematics 123.

G 1	M W F	2	1 1 0

T. A. M. 172. STRENGTH OF MATERIALS:-Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 171.

D 1	M W F	1 1	1 1 0

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):-Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150.

B 1	M W F	9	1 1 0
J 1	M W F	4	1 1 0

T. A. M. 221. RESISTANCE OF MATERIALS:-Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns, combined stresses; properties of materials. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150, 154, or 156.

A 1	M W F	8	1 1 3
F 1	M W F	1	1 1 3

T. A. M. 223. RESISTANCE OF MATERIALS LABORATORY:-Tests of steel, cast iron, aluminum alloys, concrete, and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance, engineering significance of mechanical properties. Credit 1 hour. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	M	8 10	6 1
B	F	10 12	6 1
C	T H	1 2 2	6 1
D	T U	3 5	6 1

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1958/59
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TIME TABLE

FIRST SEMESTER, 1958-1959

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UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 3
Instructions for Registration,..... 4,5
Registration Schedule, First Semester..... 6
Schedule of Tuition and Fees..... 7
Calendar, First Semester, 1958-59..... 8
Chicago Undergraduate Division Calendar, 1958-59..... 9
Urbana Calendar, 1958-59..... 10
Final Examination Schedule..... 11
Accountancy..... 12,13
Anthropology..... 14
Architecture..... 14.15.16
Art..... 16.17,18
Biological Sciences..... 19,20,21,22
Business Law..... 22
Chemistry..... 23-29
Civil Engineering..... 30
Economics..... 30,31,32
Education..... 33
Electrical Engineering..... 33
English..... 34,35
French..... 36,37
General Engineering..... 37,38,39
Geography..... 39,40
Geology..... 41,42
German..... 42,43
History..... 43,44,45
Humanities..... 45
Hygiene..... 46
Management..... 46
Marketing..... 47
Mathematics..... 47-52
Mechanical Engineering..... 52,53
Military Sciences and Tactics..... 54
Music..... 55
Philosophy..... 56
Physical Education for Men..... 57-61
Physical Education for Women..... 62,63
Physical Sciences..... 64
Physics..... 65,66,67,68
Political Science..... 68,69
Psychology..... 69, 70
Rhetoric..... 70-77
Social Sciences..... 77,78
Sociology..... 78,79
Spanish..... 79,80
Speech..... 81,82,83
Theoretical and Applied Mechanics..... 83,84,85

IZu3It
1958/59
pt.1

PRE-REGISTRATION ADVISEMENT SCHEDULE
FIRST SEMESTER 1958-59

PLACE: South wing, second floor, Navy Pier.

Use the south wing entrance.

COMMERCE AND ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, September 8	1 - 4 p.m.
F - K	Tuesday, September 9	9 - 12 noon
L - Q	Tuesday, September 9	1 - 4 p.m.
R - Z	Wednesday, September 10	9 - 12 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS

A - H	Monday, September 8	1 - 4 p.m.
I - M	Tuesday, September 9	9 - 12 noon
N - Z	Tuesday, September 9	1 - 4 p.m.

NEW STUDENTS (LIBERAL ARTS ONLY)

A - COK...9 a.m.	KLF - NEK...1 p.m.
COL - GN...10 a.m.	NEL - SMH...2 p.m.
GO - KLE...11 a.m.	SMI - Z ...3 p.m.

PHYSICAL EDUCATION:

No pre-advisement is scheduled for Physical Education Majors.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's Copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

No. 2 DEAN'S PROGRAM CARD

4. Print your I.D. number (but not your name), semester hours earned, local address, and telephone number on the front of the No. 2 Dean's Program Card. Then copy your program showing lecture, laboratory and quiz on separate lines on the front of this card and secure your adviser's signature. Courses must be listed by department and course number (e.g., English 101) and not by the descriptive title (e.g., Introduction to Poetry). Turn card over and fill out the back of the No. 2 Dean's Program Card in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program Card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in box provided (further indicated by arrows) but do not write your name on these cards.

No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and LEFT margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4, Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with program on the No. 2, Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1, Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2, and then proceed to Station No. 3 for class card check.

11. All veterans stop at Station 4.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

12. Submit all cards to the Recorder's fee card clerks at Station 5 and obtain a No. 6 Fee Assessment Card and a No. 7 Fee Receipt Card. Write your name and address on the No. 7 Identification Card.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 5, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to the clerks at Station 7. Your cards should be presented in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in R.O.T.C., report to Station 8.

16. Present cards No. 6, 7, and 4, if applicable, to one of the cashiers and pay your fees. Do not present cards No. 1, 2, 3, and 5 to cashiers. The No. 7 Fee Receipt Card and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to the clerks at Station 12 in the following sequence: No. 7, 1, 2, 3, all No. 5 cards, and No. 4, if applicable. The clerks at this station will return only the No. 7 card to you.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU ALL ALL TIMES.

REGISTRATION SCHEDULE
First Semester, Fall, 1958-59

PLACE

South wing, second floor, Navy Pier.

Use the south wing entrance.

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, September 12, 1958 will be assessed a late registration fee of $5.00.

A	-	C	Thursday, September 11	1:30 p.m.
D	-	H	Thursday, September 11	9:30 a.m.
I	-	N	Thursday, September 11	10:30 a.m.
O	-	R	Thursday, September 11	8:30 a.m.
S	-	Z	Thursday, September 11	11:30 a.m.

NEW STUDENTS

A	-	B	Friday, September 12	8:30 a.m.
C	-	D	Thursday, September 11	2:30 p.m.
E	-	G	Friday, September 12	9:30 a.m.
H	-	K	Thursday, September 11	3:30 p.m.
L	-	Mil	Friday, September 12	2:30 p.m.
Mim	-	P	Friday, September 12	1:30 p.m.
Q	-	So	Friday, September 12	11:30 a.m.
Sp	-	Z	Friday, September 12	10:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m., Friday, September 12.

All University offices will be closed on Saturday, September 13, 1958.

Late registration will begin on Monday, September 15, 1958.

Instruction will begin on Monday, September 15, 1958.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more ..... $ 75.00
(Eight hours or less pay tuition at rate of $6.00 a semester hour)

Non-residents of Illinois taking nine hours or more.....$250.00
(Eight hours or less pay tuition at rate of $20.00 a semester hour)

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours.....$ 7.00
(Less than 5 hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours.....$ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours.....$ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the second semester 1957-58 or the summer session 1958 must pay a General Deposit of.....$ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed the first day of late registration, Monday, September 15, 1958.

Late registration fee.....$ 5.00

CALENDAR

First Semester, Fall, 1958

Wed. Sept. 3 - Wed., Sept. 10	Orientation Period
Thurs., Sept. 11 - Fri., Sept. 12	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, September 12, for registration)
Mon., Sept. 15	Instruction Begins
Thurs., Sept. 18, 1:00 p.m.	Earliest time at which program changes man be made.
Fri., Sept. 26, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Oct. 31, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals
Fri., Nov. 7, 12:00 noon	Mid-semester grades are due.
Fri., Nov. 7, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Wed., Nov. 26, 6:00 p.m.	Thanksgiving vacation begins.
Mon., Decl, 8:00 a.m.	Thanksgiving vacation ends.
Wed., Dec. 3	Illinois Day (State admitted to Union 1818)
Wed., Dec. 3, 4:00 p.m.	Students withdrawing on or after this date must petition for readmission.
Fri., Dec. 5, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals.
Wed., Dec. 17, 6:00 p.m.	Christmas vacation begins.
Mon., Jan. 5, 8:00 a.m.	Christmas vacation ends.
Fri., Jan. 16 - Sat., Jan. 24	Semester Examinations.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

ACADEMIC CALENDAR 1958-59

First Semester (Fall 1958)

Sept. 3, Wed.-Sept. 10, Wed.	Orientation Period
Sept. 11, Thurs.-Sept. 12, Fri.	Registration
Sept. 15, Monday	Instruction begins
Nov. 26, Wed., 6 p.m.	Thanksgiving vacation begins
Dec. 1, Mon., 8 a.m.	Thanksgiving vacation ends
Dec. 3, Wednesday	Illinois Day (State admitted to Union 1818--Not a holiday)
Dec. 17, Wed., 6 p.m.	Christmas vacation begins
Jan. 5, Mon., 8 a.m.	Christmas vacation ends
Jan. 16, Fri.-Jan. 24, Sat.	Semester Examinations

Second Semester (Spring 1959)

Jan. 30, Fri.-Feb. 4, Wed.	Orientation Period
Feb. 5, Thurs.-Feb. 6, Fri.	Registration
Feb 9, Mon.	Instruction begins
Mar. 2, Mon.	University Day (University opened, 1868-- Not a holiday)
Mar. 26, Thurs., 6 p.m.	Easter Vacation Begins
Apr. 1, Wed., 8 a.m.	Easter Vacation ends
May 8, Fri.	Honors Day
May 30, Sat.	Memorial Day (Holiday)
May 28, Thurs.-June 6, Sat.	Semester Examinations

Summer Session 1959

June 19, Fri.	Registration
June 22, Mon.	Instruction begins
July 4, Sat.	Independence Day (Holiday)
Aug. 14, Fri.	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA

ACADEMIC CALENDAR 1958-59

First Semester (Fall 1958)

Sept. 2, Tues.-Sept. 5, Fri.	Entrance Examinations
Sept. 8, Mon.-Sept. 13, Sat.	Freshman Week and Registration
Sept. 15, Mon.	Instruction begins
Nov. 26, Wed., 1 p.m.	Thanksgiving vacation begins
Dec. 1, Mon., 1 p.m.	Thanksgiving vacation ends
Dec. 3, Wed.	Illinois Day (State admitted to the Union 1818)
Dec. 20, Sat., 1 p.m.	Christmas vacation begins
Jan. 5, Mon., 8 a.m.	Christmas vacation ends
Jan. 15, Thurs.	Study Day, classes dismissed
Jan. 16, Fri.-Jan. 24, Sat.	Semester examinations

Second Semester (Spring 1959)

Jan. 27, Tues.-Jan. 30, Fri.	Entrance Examinations
Feb. 2, Mon-Feb. 4, Wed.	Registration
Feb. 5, Thurs.	Instruction begins
Mar. 2, Mon.	University Day (University opened, 1868)
Mar. 25, Wed., 1 p.m.	Spring vacation begins
Mar. 30, Mon., 1 p.m.	Spring vacation ends
May 1, Fri.	Honors Day (Classes dismissed at noon)
May 30, Sat.	Memorial Day (Holiday)
May 26, Tues.	Study Day, classes dismissed
May 27, Wed.-June 5, Fri.	Semester Examinations
June 13, Sat.	Commencement exercises

Summer Session 1959

June 2, Tue.-June 5, Fri.	Entrance Examinations
June 15, Mon.	Registration
June 16, Tues.	Instruction begins
July 4, Sat.	Independence Day (Holiday)
Aug. 7, Fri.-Aug. 8, Sat.	Summer Session Examinations

FINAL EXAMINATION SCHEDULE, I 1958-59
January 16 through January 24, 1959

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes Meeting at	ALL COURSES MEETING ON THE MWF SEQUENCE ONLY	ALL COURSES OTHER THAN THOSE MEETING ON THE MWF SEQUENCE ONLY
8:00	Thurs. Jan. 22, 1:30 p.m.*	Thurs. Jan 22, 1:30 p.m.*
9:00	Tues. Jan. 20, 9:00 a.m.	Sat. Jan. 24, 9:00 a.m.
10:00	Wed. Jan 21, 9:00 a.m.	Fri. Jan. 23, 9:00 a.m.
11:00	Mon. Jan 19, 9:00 a.m.	Sat. Jan 17, 9:00 a.m.
12:00	Fri. Jan. 16, 9:00 a.m.	Thurs. Jan. 22, 9:00 a.m.
1:00	Fri. Jan. 16, 1:30 p.m.	Sat. Jan. 17, 1:30 p.m.
2:00	Tues. Jan 20, 1:30 p.m.	Thurs. Jan. 22, 1:30 p.m.
3:00	Fri. Jan. 23 1:30 p.m.	Mon. Jan. 19, 1:30 p.m.
4:00	Sat. Jan 24, 1:30 p.m.	Wed. Jan. 21, 1:30 p.m.

Examinations in courses involving one lecture section may be held at the time scheduled for the lecture (Single lectures will be construed to be on the MWF or MTT sequence only.) In the instance of sections combining under a single lecture which occurs only once in a sequence, any conflicts with a final examination which is being given according to the regularly scheduled examination, must be resolved by the Department teaching the lecture course and so combining the sections. Courses with two or more lecture sections will either have examinations at the times of the lectures or will be combined into a single examination. In cases of conflicts involving two lectures on a single sequence, the divisions concerned will make individual arrangements.

ONE-HOUR CLASSES: Examinations for one-hour classes are to be arranged for by the instructors concerned within the examination period.

*The college office of the student concerned will resolve any conflict, except combined section conflicts occasioned by this schedule.

ACCOUNTANCY

Accy. 101. PRINCIPLES OF ACCOUNTING:- Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	21	LIPKIN
M1	MTT	9	16	MORICI
C1	MWF	10	23	SCHNEIDER
N1	MTT	10	21	LIPKIN
D1	MWF	11	16	MORICI
P1	MTT	11	23	KABBES
E1	MWF	12	24	FOX
Q1	MTT	12	23	KABBES
F1	MWF	1	22	SCHNEIDER
R1	MTT	1	38	ANDREWS
G1	MWF	2	22	SCHNEIDER
G2	MWF	2	18	MORICI
H1	MWF	3	24	FOX
T1	MTT	3	19	HEDISH
T2	MTT	3	23	ANDREWS
J1	MWF	4	24	FOX
J2	MWF	4	38	KABBES
U1	MTT	4	19	HEDISH

Accy. 105. ACCOUNTING PROCEDURE:- Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

M1	MTT	9	22	ANDREWS
C1	MWF	10	18	MALINOSKY
D1	MWF	11	18	MALINOSKY
P1	MTT	11	22	ANDREWS
E1	MWF	12	18	HEDISH
F1	MWF	1	18	HEDISH

Accy. 106. ELEMENTARY COST ACCOUNTING:- Accounting for production management Principles and methods of accounting for managerial control of costs of production. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

N1	MTT	10	16	MORICI
E1	MWF	12	20	LIPKIN
F1	MWF	1	17	MALINOSKY
R1	MTT	1	20	LIPKIN
G1	MWF	2	17	MALINOSKY

Accy. 108. INTERMEDIATE ACCOUNTING:- Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	23	SCHNEIDER
G1	MWF	2	24	KABBES

ANTHROPOLOGY

Anthrop. 102. INTRODUCTION TO ANTHROPOLOGY: THE ORIGIN OF MAN AND CULTURE:- An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology. Credit 3 hours.

R1	TU	12	14	WARREN
	TT	1	14	
U1	MTT	4	16	WARREN

ARCHITECTURE

Arch. 101. INTRODUCTION TO ARCHITECTURE:- Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107. Credit 3 hours.

LECT	X	W	11	251
LAB	A	MTTF	8/10	241
LAB	B	MTTF	10/12	241
LAB	C	MTTF	12/2	241
LAB	D	MTTF	3/5	241

Arch. 113. HISTORY OF ANCIENT ARCHITECTURE:- A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Credit 2 hours. Prerequisite: Architecture 131 or sophomore standing.

LECT	P	TT	10	251

Arch. 131. ARCHITECTURAL DESIGN:- Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Credit 3 hours. Prerequisite: Sophomore standing, Arch. 101, credit or registration in G.E. 108, and registration in Arch. 141.

ARCH. 131 (Cont'd)

LECT	Y	W	2	251
LAB	A	MF	9/12	241
		W	10/12	241
LAB	B1	TT	8/11	241
		W	9/11	241
LAB	B	MF	3/6	241
		W	3/5	241
LAB	B1	TT	3/6	241
		W	3/5	241

Arch. 132. ARCHITECTURAL DESIGN:- Continued study of the fundamentals of architectural design. Credit 3 hours. Prerequisite: Architecture 131.

LEC	Z	W	10	251
LAB	A	MF	8/11	242
		W	8/10	242
LAB	B	MF	3/6	242
		W	3/5	242

Arch 133. ARCHITECTURAL DESIGN:- Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Credit 3 hours. Prerequisite: Architecture 132, credit or registration in T.A.M. 150 or 171, and registration in Arch. 143.

A	MWF	8/11	242
B	MWF	3/6	242

Arch 141. MATERIALS AND METHODS OF CONSTRUCTION I:- Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Registration in Architecture 131.

S MF 2 251

Arch. 142. MATERIALS AND METHODS OF CONSTRUCTION II:-Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Credit 2 hours. Prerequisite: Architecture 141.

P MF 11 251

Arch. 143. MATERIALS AND METHODS OF CONSTRUCTION III:- Semi-fireproof construction, manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Architecture 142 and registration in Arch. 133.

R TT 1 251

Arch. 214. HISTORY OF MEDIEVAL ARCHITECTURE:- A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Credit 3 hours. Prerequisite: Architecture 113 or consent of instructor.

F MWF 1 251

ART

Art. 111. SURVEY OF ART HISTORY:-Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. Credit 3 hours.

H MWF 3 251

Art. 115. ART APPRECIATION:-An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. Credit 3 hours.

B	MWF	9	251

ART 117. DRAWING I: - Theory and practice in the elements of drawing. Credit 3 hours.

A	TWT	11/2	91

ART 119. DESIGN:-Theory and practice in the elements of design. Credit 2 hours.

A	TT	8/11	83

Art 181. FREEHAND DRAWING:-Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours.

A	MWF	8/10	83
B	MWF	10/12	83
C	MWF	12/2	83
D	MWF	2/4	83
E	MWF	4/6	83
F	MWF	8/10	84
G	MWF	12/2	84
H	MWF	4/6	84

Art. 182. FREEHAND DRAWING:-Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 181.

A	TT	11/2	83
B	MWF	2/4	84

Art. 183. FREEHAND DRAWING:-Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 182.

A	MF	8/11	91
B	MF	11/2	91
C	MF	3/6	91
D	TT	3/6	91

Art 184. FREEHAND DRAWING:-Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 183.

A	TT	11/2	91

Art 281 FREEHAND DRAWING:-Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184. Credit 2 hours.

A	TT	8/11	84
B	TT	3/6	84

BIOLOGICAL SCIENCES

Biology 101. FUNDAMENTALS OF BIOLOGY:-This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	B1	WF	9	210	GLASSMAN
LAB	1	TT	8/10	46	MADISON
LAB	2	TT	10/12	46	MADISON
LAB	3	TT	12 2	46	SHOMAY
LAB	4	TT	3/5	46	SHOMAY
LAB	5	M	2/4	48	BOND
		F	2/4	46	
LAB	6	WF	12/2	48	BOND
LAB	7	TT	12/2	43	
LEC	Q1	TT	12	210	YOKOYAMA
LAB	8	M	10/12	48	SANGSTER
		F	10/12	46	
LAB	9	M	12/2	48	SCUDDER
		F	12/2	46	
LAB	10	M	4/6	48	SCUDDER
		F	4/6	46	SCUDDER
LAB	11	TT	3/5	43	
LAB	12	WF	12/2	43	YOKOYAMA
LAB	13	MW	2/4	46	YOKOYAMA
LAB	14	MF	4/6	44	YOKOYAMA

BIOL. 101 (Cont'd)

LEC	R1	TT	1	218	PRESLEY
LAB	15	MW	12/2	46	PICKETT
LAB	16	WF	4/6	48	CHAPP
LAB	17	TT	8/10	48	PRESLEY
LAB	18	TT	10/12	48	PRESLEY
LAB	19	MW	10/12	46	BOND
LAB	20	WF	4/6	43	

LEC	T1	TT	3	213	LITTLE
LAB	21	TT	122I	48	ROUFFA
LAB	22	TT	4/6	48	LITTLE
LAB	23	WF	8/10	48	PRESLEY
LAB	24	WF	10/12	43	PRESLEY
LAB	25	MW	2/4	43	PICKETT
LAB	26	MF	8/10	46	BOND
LAB	27	WF	12/2	44	

Biology 102. FUNDAMENTALS OF BIOLOGY CONTINUED:-Application of biological principles to the living world. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132. (Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	E1	WF	12	210	GLASSMAN CHAPP
LAB	1	TT	8/10	44	GLASSMAN
LAB	2	TT	10/12	44	GLASSMAN
LAB	3	WF	10/12	44	GLASSMAN
LAB	4	TT	12/2	44	CHAPP
LAB	5	TT	3/5	44	CHAPP
LAB	6	WF	2/4	44	CHAPP

Biology 111. GENERAL BOTANY:- The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor.

LEC	N1	TT	10	210	ROUFFA
LAB	1	WF	10/12	48	ROUFFA
LAB	2	WF	2/4	48	ROUFFA

Biology 121. MICROBIOLOGY:-A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	C1	MW	10	210	MADISON
LAB	1	MW	8/10	43	MADISON

Biology 131. GENERAL ZOOLOGY:-A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	D1	WF	11	210	SHOMAY
LAB	1	WF	8/10	44	SHOMAY

Biology 132. COMPARATIVE VERTEBRATE ANATOMY:-Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	G1	MWF	2	210	SHANK
LAB	1	MWF	8/10	45	SPIRAKIS
LAB	2	MWF	10/12	45	SHANK
LAB	3	TT	11/2	45	SPIRAKIS

Biology 141. VERTEBRATE PHYSIOLOGY:-The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory, Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 102, or consent of the instructor.

LEC	P1	TT	11	43	PICKETT
QUIZ	1	T	9	43	SPIRAKIS
LAB	1	TH	8/11	43	SPIRAKIS

Biology 333. VERTEBRATE EMBRYOLOGY:-The development of the vertebrate body and its organs. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 132, junior standing.

LEC	F1	MWF	1	210	SANGSTER
LAB	1	MWF	2/4	45	SANGSTER
LAB	2	TT	3/6	45	SCUDDER

BUSINESS LAW

Business Law 100. BASIC PRINCIPLES OF BUSINESS LAW:- Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Credit 3 hours. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

C1	MWF	10	24	FOX

CHEMISTRY

Chem. 101. GENERAL CHEMISTRY.-For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	N	TT	10	204	HUNT
LAB	1	MWF	8/10	53	JOHNSON
QUIZ	1	TT	8	74	JOHNSON
LAB	2	MWF	10/12	53	CARBONARO
QUIZ	2	TT	11	80	CARBONARO
LAB	3	MWF	1/3	53	JOHNSON
QUIZ	3	TT	1	75	JOHNSON
LAB	4	MWF	3/5	53	POTEMPA SAVOY
QUIZ	4	TT	3	75	POTEMPA
LAB	5	MWF	12/2	53	DAFLER
QUIZ	5	TT	12	80	DAFLER
LAB	6	TT	11/2	53	FARAG
QUIZ	6	WF	1	75	FARAG

Chem. 102. GENERAL CHEMISTRY.-For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

LEC	C	WF	10	204	MUELLER
LAB	8	TU	8/10	53	MUELLER
QUIZ	8	WF	8	74	MUELLER
LAB	9	F	12/2	53	MUELLER
QUIZ	9	TT	10	75	MUELLER
LAB	10	W	1/3	53	MUELLER
QUIZ	10	TT	1	76	MUELLER

CHEM. 102 (Cont'd)

LAB	11	M	2/4	53	MANSFIELD
QUIZ	11	TT	10	76	MANSFIELD
LAB	12	M	9/11	53	CASTEN
QUIZ	12	WF	9	76	CASTEN
LAB	13	TH	3/5	53	DAFLER
QUIZ	13	WF	2	80	DAFLER
LEC	M	TT	9	210	SCHRAGE
LAB	15	M	1/3	53	FARAG
QUIZ	15	WF	9	80	FARAG
LAB	16	TH	10/12	53	HART
QUIZ	16	WF	10	80	HART
LAB	17	W	8/10	53	KLAAS
QUIZ	17	WF	12	74	SCHRAGE
LAB	18	F	1/3	53	LOTHIAN
QUIZ	18	MW	2	75	LOTHIAN
LAB	19	TU	10/12	53	SEABRIGHT
QUIZ	19	MF	2	76	SEABRIGHT
LAB	20	W	1/3	53	SEABRIGHT
QUIZ	20	TT	10	80	JOHNSON
LAB	21	M	2/4	53	CARBONARO
QUIZ	21	WF	3	75	CARBONARO

Chem. 103. GENERAL CHEMISTRY:- For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Students who have recived entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 103 or 112.

LEC	D	WF	11	204	BACHRACH
LAB	23	MW	8/10	50	SACKHEIM
QUIZ	23	TT	8	75	SACKHEIM
LAB	24	TT	9/11	50	SACKHEIM
QUIZ	24	WF	10	74	SACKHEIM
LAB	25	MW	1/3	50	HERZOG
QUIZ	25	TT	11	75	HERZOG
LAB	26	MW	8/10	50	BACHRACH
QUIZ	26	TT	9	76	BACHRACH
LAB	27	MF	2/4	50	BACHRACH
QUIZ	27	WF	12	75	MILLER
LAB	28	TT	9/11	50	
QUIZ	28	TT	8	80	

LEC	P	TT	11	204	BACHRACH
LAB	30	TT	9/11	50	CARBONARO
QUIZ	30	WF	1	74	CARBONARO
LAB	31	WF	10/12	50	HERZOG
QUIZ	31	TT	9	80	HERZOG
LAB	32	TT	12/2	50	HERZOG
QUIZ	32	WF	3	80	HERZOG
LAB	33	TT	3/5	50	CASTEN
QUIZ	33	WF	3	74	CASTEN
LAB	34	MW	10/12	50	FARAG
QUIZ	34	MF	8	76	FARAG

CHEM. 103 (Cont'd)

LEC	T	TT	3	204	KLAAS
LAB	36	MF	11/1	50	SACKHEIM
QUIZ	36	TT	12	74	SACKHEIM
LAB	37	MW	2/4	50	KLAAS
QUIZ	37	TT	12	75	KLAAS
LAB	38	TT	10/12	50	KLAAS
QUIZ	38	MW	11	75	KLAAS
LAB	39	TT	8/10	50	DAFLER
QUIZ	39	MW	3	76	DAFLER
LAB	40	TT	4/6	50	POTEMPA SAVOY
QUIZ	40	MW	5	74	POTEMPA

Chem. 104. CHEMISTRY OF THE METALLIC ELEMENTS:-Limited to students in engineering curricula. Credit 4 hours. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

LEC	P	TT	11	210	HUITEMA
LAB	43	MW	10/12	50	HUITEMA
QUIZ	43	TT	9	74	HUITEMA
LAB	44	TT	9/11	50	PERRY
QUIZ	44	WF	9	75	PERRY
LAB	45	WF	12/2	50	PERRY
QUIZ	45	TT	12	76	PERRY
LAB	46	MW	2/4	50	PERRY
QUIZ	46	MF	11	76	PERRY
LAB	47	WF	8/10	50	GLASEL
QUIZ	47	WF	11	80	GLASEL

Chem. 105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS:-For students who are not eligible for Chemistry 104 or 106, Credit 5 hours. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	R	TT	1	210	HUNT
LAB	51	MWF	8/10	53	LOTHIAN
QUIZ	51	TT	8	76	LOTHIAN
LAB	52	MWF	10/12	53	HUNT
QUIZ	52	TT	11	74	HUNT
LAB	53	MWF	1/3	53	CASTEN
QUIZ	53	TT	11	76	CASTEN

Chem. 106. INORGANIC CHEMISTRY:-Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit 5 hours. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	T	TT	3	210	RIETZ
LAB	61	MWF	3/5	50	RIETZ LOTHIAN
QUIZ	61	TT	4	74	RIETZ

Chem. 107. GENERAL CHEMISTRY:-For students in curricula in chemistry or chemical engineering. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

LEC	H	WF	3	204	WELDON
LAB	66	TT	10/12	53	WELDON
QUIZ	66	MWF	11	74	WELDON
LAB	67	TT	3/5	53	WELDON COWIN
QUIZ	67	MTT	1	74	WELDON

Chem. 109. GENERAL AND INORGANIC CHEMISTRY:-A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Not open to students who have college credit in chemistry. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the highest quarter of the class.

LEC	F	MWF	1	204	HUITEMA
LAB	71	F	9/12	50	SEABRIGHT
QUIZ	71	TT	1	80	SEABRIGHT
LAB	72	TU	11/2	50	HART
QUIZ	72	WF	12	76	HART
LAB	73	TH	9/12	50	LOTHIAN
QUIZ	73	MW	10	76	LOTHIAN
LAB	74	W	3/6	50	SAVOY
QUIZ	74	TT	3	74	SAVOY

Chem. 110. QUALITATIVE ANALYSIS:-Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major is chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Credit 5 hours. Prerequisite: Chemistry 106 or equivalent.

LEC	Q	TT	12	65	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12		
QUIZ	76	TT	9	75	MANSFIELD

Chem. 122. ELEMENTARY QUANTITATIVE ANALYSIS:-Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	Q	TT	12	204	BABLER
LAB	81	MWF	9/12	54	GOTTLIEB
QUIZ	81	TU	10	74	GOTTLIEB
LAB	82	MWF	1/4	54	GOTTLIEB
QUIZ	82	TH	3	76	GOTTLIEB

Chem. 124. QUANTITATIVE ANALYSIS:-For all students in the chemistry curriculum and chemical engineering. Credit 5 hours. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	G	WF	2	204	BABLER
LAB	86	MWF	8/11	54	BABLER COWIN
QUIZ	86	M	2	80	BABLER

Chem. 133. ELEMENTARY ORGANIC CHEMISTRY:-To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	E	WF	12	204	CRUM
EXAM		M	12	204	
LAB	91	TT	9/12	52	CRUM
QUIZ	91	M	10	74	CRUM
LAB	92	MW	2/5	52	CRUM
QUIZ	92	F	2	75	CRUM
LAB	93	MW	8/11	52	SEABRIGHT
QUIZ	93	F	8	75	SEABRIGHT

CHEM. 342. PHYSICAL CHEMISTRY:-This course and Chemistry 344 constitute a one-year study of chemical principles, covering topics such as atomic and molecular structure, properties and thermodynamics of gases, liquids, crystals, phase equilibria, solutions, surface chemistry, chemical equilibrium, electrochemistry, chemical thermodynamics, and chemical kinetics. Students who do not intend to take Chemistry 344 should not enroll in Chemistry 342. Credit 3 hours. Prerequisite: Chemistry 124; Physics 106, 107 and 108, or two semesters of general physics with concurrent registration in the third semester; credit or registration in Mathematics 143; or equivalents. I.

LEC	C	MWF	10	75	SCHRAGE

CHEM. 343. PHYSICAL CHEMISTRY LABORATORY:-Quantitative experimental study of chemical principles. This course and Chemistry 345 constitute a one-year introduction to experimental physical chemistry. Credit 1 hour. Prerequisite: credit or registration Chemistry 342. I

LAB	98	F	2/5	50A	SCHRAGE

CIVIL ENGINEERING

C. E. 105. SURVEYING:-Use of transit, level and tape; fundamental surveying procedures and office computations; land surveying. Credit 2 hours. Prerequisite: General Engineering 101 and Mathematics 114.

LEC	B	M	9	63	
LAB	M	W	9/12	63	
LAB	N	F	9/12	63	

C. E. 160. ENGINEERING CONSTRUCTION AND MATERIALS:-Materials, types of construction, and details of buildings. Credit 3 hours. Prerequisite: Sophomore standing.

	G	MWF	2	63 COE

C. E. 235. PLAIN CONCRETE:-Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning, field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions;calculations and graphs based on values from concrete proporting projects. Credit 2 hours. Prerequisite: Sophomore standing in engineering or architecture.

A	TT	9/11	61	COE

ECONOMICS

Econ. 100. INTRODUCTION TO BUSINESS:-An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. Credit 3 hours.

B1	MWF	9	18	SHAW
M1	MTT	9	24	GRAMPP
C1	MWF	10	38	GILLETT
N1	MTT	10	20	
D1	MWF	11	19	GELDARD
P1	MTT	11	38	GRAMPP
E1	MWF	12	21	LARSON
E2	MWF	12	19	SHAW
Q1	MTT	12	22	
F1	MWF	1	19	GELDARD

ECON. 100 (Cont'd)

G1	MWF	2	23	GILLETT
G2	MWF	2	21	LARSON
H1	MWF	3	16	SHAW
T1	MTT	3	21	KNUDSON
J1	MWF	4	23	GELDARD
U1	MTT	4	21	KNUDSON

Econ. 102. PRINCIPLES OF ECONOMICS:-An introduction to the major areas of modern economic theory and public policy--product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Credit 3 hours. Prerequisite: One year of college work.

M1	MTT	9	19	LARSON
N1	MTT	10	19	LARSON
D1	MWF	11	17	WILLIAMS
E1	MWF	12	17	WILLIAMS
R1	MTT	1	21	JUNG
G1	MWF	2	38	GRAMPP
H1	MWF	3	38	GRAMPP
U1	MTT	4	22	JUNG

Econ. 103. PRINCIPLES OF ECONOMICS:-Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Credit 3 hours. Prerequisite: Economics 102.

D1	MWF	11	20	SELTZER
G1	MWF	2	16	SHAW
H1	MWF	3	20	SELTZER

Econ. 108. ELEMENTS OF ECONOMICS:-A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Credit 3 hours. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

B1	MWF	9	20	SELTZER
M1	MTT	9	17	MILLER
D1	MWF	11	24	DUNNE
F1	MWF	1	24	DUNNE
R1	MTT	1	16	MILLER
G1	MWF	2	20	SELTZER
H1	MWF	3	17	WILLIAMS
J1	MWF	4	17	WILLIAMS

Econ. 136. AMERICAN ECONOMIC HISTORY:-Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Credit 3 hours. Open to freshmen and sophomores only.

C1	MWF	10	17	MILLER
E1	MWF	12	16	MILLER
H1	MWF	3	18	
J1	MWF	4	18	

Econ. 138. EUROPEAN ECONOMIC HISTORY:-The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations Credit 3 hours. Open to freshmen and sophomores only.

G1	MWF	2	19	GELDARD

Econ. 170. ELEMENTS OF STATISTICS:-Methods of collection--presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Credit 3 hours. Prerequisite: Economics 102 or 108; sophomore standing.

QUIZ	B1	MW	9	33	DERRICK
LAB	1	F	9/11	33	DERRICK
QUIZ	D1	MW	11	33	DERRICK
LAB	2	F	11/1	33	DERRICK
QUIZ	G1	MW	2	33	DERRICK
LAB	3	F	2/4	33	DERRICK

EDUCATION

Ed. 101. NATURE OF THE TEACHING PROFESSION:-An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. Credit 2 hours.

N1	TT	10	28	RICKS
P1	TT	11	28	RICKS
R1	TT	1	28	RICKS

Ed. 201. FOUNDATIONS OF AMERICAN EDUCATION:-A sutdy of contemporary American public education in the setting of current American Culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching professiong. Credit 2 hours. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

D1	WF	11	28	RICKS

ELECTRICAL ENGINEERING

E. E. 126. ELECTRIC CIRCUITS AND FIELDS:-Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Credit 4 hours. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	B1	MWF	9	113	KLAPPERICH
LAB	B	TU	9/12	120	KLAPPERICH
QUIZ	G1	MWF	2	113	KLAPPERICH
LAB	G	TH	3/6	120	KLAPPERICH

ENGLISH

English 101. INTRODUCTION TO POETRY:-Understanding of poetry through the reading and discussion of representative poems. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	215	I MILLER
N1	MTT	10	203	JACKMAN
D1	MWF	11	215	F JOHNSON
F1	MWF	1	215	ATWOOD
R1	MTT	1	216	KARANIKAS
T1	MTT	3	216	HIPPLE

English 102. INTRODUCTION TO DRAMA:-Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	214	MACKIN
L1	MTT	8	211	S MILLER
D1	MWF	11	209	CRAWLEY
R1	MTT	1	206	LOVE
G1	MWF	2	215	WEISS
H1	MWF	3	215	GREENWALD

English 103. INTRODUCTION TO FICTION:- Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's "Pride and Prejudice", Balzac's "Pere Goriot", Arnold Bennett's "Old Wives' Tale", Dostoevski's "Crime and Punishment", Robert Penn Warren's "All the King's Men", and the anthology "Reading Modern Short Stories". Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	216	LEONHARD
M1	MTT	9	216	GRIEST
N1	MTT	10	211	STRONKS
P1	M	11	220	KOGAN
	TT	11	211	KOGAN
Q1	MTT	12	206	NICHOLAS
G1	MWF	2	214	KERWICK
J1	MWF	4	215	SCHILLER
U1	MTT	4	211	CASSELL

English 113. AMERICAN LITERATURE:-Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	212	WRIGHT
R1	MTT	1	211	KOGAN
G1	MWF	2	211	WILLETT

English 114. AMERICAN LITERATURE:-Classic American Authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

L1	MTT	8	212	STRONKS
D1	MWF	11	212	WRIGHT
G1	MWF	2	212	SCHILLER
T1	MTT	3	212	JORDAN

English 121. CHIEF ENGLISH WRITERS BEFORE 1800:-"Canterbury Tales", "Utopia", two plays by Shakespeare, "Paradise Lost", Gulliver's Travels", "Tom Jones", "Rasselas". This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	MWF	11	216	WEISS
G1	MWF	2	216	COX

English 122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY:-Wordsworth, Byron, Carlyle's "Past and Present", Arnold's prose and poetry, Fitz-Gerald's "The Rubaiyat of Omar Khayyam", readings from T. H. Huxley, Browning's poems, and one novel. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	212	J JOHNSON

English 123. CHIEF MODERN ENGLISH WRITERS:-Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others, Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	215	FREYER

English 131. INTRODUCTION TO SHAKESPEARE:-Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	215	VEST

F R E N C H

French 101. ELEMENTARY COURSE:-Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	226	SKOGEN
B1	TWTF	9	224	LEIN
C1	TWTF	10	224	LEIN
C2	TWTF	10	226	SKOGEN
D1	TWTF	11	226	COWLES
E1	TWTF	12	226	COWLES
E2	TWTF	12	228	SKOGEN
H1	TWTF	3	226	COWLES
J1	TWTF	4	228	MEYER

French 102. ELEMENTARY COURSE:-Continuation of French 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	226	SKOGEN
D1	TWTF	11	224	LEIN
H1	TWTF	3	224	MEYER

French 103. MODERN FRENCH:-Rapid reading of modern authors, syntax, and composition; some conversational practice. Credit 4 hours. Prerequisite: French 102 or two years of high school French.

B1	TWTF	9	228	SCHUYLER
C1	TWTF	10	228	SCHUYLER
F1	TWTF	1	224	LEIN

French 104. MODERN FRENCH:-Continuation of French 103. Credit 4 hours. Prerequisite: French 103 or three years of high school French.

D1	TWTF	11	228	SCHUYLER
F1	TWTF	1	226	COWLES

French 201. INTRODUCTION TO FRENCH LITERATURE:-Credit 3 hours. Prerequisite: French 104 or four years of high school French.

F1	MWF	1	228	SCHUYLER

GENERAL ENGINEERING

G. E. 101. ELEMENTS OF DRAWING:-Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Credit 3 hours. Prerequisite: Plane geometry.

A1	MWF	8/10	135
A2	MWF	8/10	136
A3	MWF	8/10	137
A4	MWF	8/10	141
B1	MWF	10/12	135
B2	MWF	10/12	136
B3	MWF	10/12	137
B4	MWF	10/12	141
C1	MWF	12/2	135
C2	MWF	12/2	136
C3	MWF	12/2	137
C4	MWF	12/2	141
D1	MWF	2/4	135
D2	MWF	2/4	136
D3	MWF	2/4	137
D4	MWF	2/4	141

G. E. 101 (Cont'd)

E1	MWF	4/6	135
E2	MWF	4/6	136
E3	MWF	4/6	137
F1	TT	8/11	135
F3	TT	8/11	137
F4	TT	8/11	141
F5	TT	8/11	143
G1	TT	11/2	135
G3	TT	11/2	137
G4	TT	11/2	141

G. E. 102. ENGINEERING GEOMETRY:-Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Credit 3 hours. Prerequisite: General Engineering 101.

A5	MWF	8/10	143
B5	MWF	10/12	143
B7	MWF	10/12	146
C5	MWF	12/2	143
D5	MWF	2/4	143
G5	MWF	8/11	143

G. E. 107. ARCHITECTURAL PROJECTIONS:-Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Credit 2 hours. Prerequisite: Plane geometry.

A6	MWF	8/10	145
B6	MWF	10/12	145
C6	MWF	12/2	145
E6	MWF	4/6	145
F6	TT	8/11	145
G6	TT	11/2	145

G. E. 108. ARCHITECTURAL PROJECTIONS:-Shades and shadows; oblique, isometric, and perspective drawings; developments. Credit 2 hours. Prerequisite: General Engineering 107.

A7	MWF	8/10	146
C7	MWF	12/2	146

G. E. 111. ADVANCED DRAFTING FOR CIVIL ENGINEERS:-Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

G7	TT	11/2	146

G. E. 112. GENERAL ENGINEERING TECHNOLOGY:-For mechanical engineers. Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

F2	TT	8/10	136
G2	TT	12/2	136

G. E. 212. GRAPHICAL CALCULATIONS:-Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Credit 1 hour. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

N2	TT	10	136
P2	TT	11	136

GEOGRAPHY

Geog. 101. ELEMENTS OF GEOGRAPHY:-The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit.

LEC	N1	TT	10	218	FINNEY
QUIZ	A1	MWF	8	13	RHEUMER
QUIZ	P1	TT	11	13	FINNEY
		TH	12	13	FINNEY
QUIZ	F1	MWF	1	14	FINNEY

GEOG. 101 (Cont'd)

LEC	E1	WF	12	218	CUTSHALL
QUIZ	C1	MWF	10	13	RHEUMER
QUIZ	D1	MWF	11	13	CUTSHALL
QUIZ	G1	MWF	2	13	CUTSHALL

Geog. 104. WORLD REGIONAL GEOGRAPHY:-Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

D1	MWF	11	14	COLBY
G1	MWF	2	14	COLBY

Geog. 105. INTRODUCTORY ECONOMIC GEOGRAPHY:-Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit

E1	MWF	12	14	FINNEY

Geog. 111. INTRODUCTORY METEOROLOGY:-The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Credit 3 hours. Prerequisite: Geography 101 or consent of instructor.

B1	MWF	9	13	RHEUMER
F1	MWF	1	13	RHEUMER

GEOLOGY

Geol. 101. PHYSICAL GEOLOGY:-Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	204	KARPINSKI
LAB	1	TU	8/10	42	KURS
QUIZ	1	TH	8	42	KURS
LAB	2	TH	9/11	42	KURS
QUIZ	2	TU	10	42	KURS
LAB	3	M	10/12	42	DEMAR
QUIZ	3	W	10	42	DEMAR
LAB	4	F	10/12	42	KURS
QUIZ	4	W	11	42	KURS
LAB	5	W	12/2	42	DEMAR
QUIZ	5	M	1	42	DEMAR
LAB	6	F	12/2	42	KARPINSKI
QUIZ	6	M	12	42	KARPINSKI
LAB	7	M	2/4	42	KURS
QUIZ	7	W	2	42	KURS

Geol. 102. HISTORICAL GEOLOGY:-Evolution of the earth and its life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 142.

LEC	N	TT	10	65	DEMAR
LAB	11	TU	11/1	42	DEMAR
QUIZ	11	TH	12	42	DEMAR

Geol. 131. MINERALOGY:-A systematic study of minerals. The nature of minerals as crystalline materials, and their geologic relations are emphasized. Crystal models, crystals, and the common non-silicate minerals are studied in the laboratory. Lecture and laboratory. Credit 4 hours. Prerequisite: One semester of college chemistry.

	A	MWF	8/10	42	KURS

Geol. 150. GEOLOGY FOR ENGINEERS:-Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	G	MW	2	213	KARPINSKI
LAB	21	TU	3/5	42	KARPINSKI
LAB	22	TH	3/5	42	KARPINSKI

GERMAN

German 101. ELEMENTARY COURSE:-Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	220	WILLNER
B2	TWTF	9	220	WILLNER
B1	TWTF	9	223	VARDAMAN
C1	TWTF	10	220	TEICHMANN
D1	TWTF	11	220	TEICHMANN
D2	TWTF	11	223	BRAUNFELD
E1	TWTF	12	220	ROSMAN
F2	TWTF	12	223	HARTOCH
F1	TWTF	1	220	BRAUNFELD
F2	TWTF	1	223	KAUF
H1	TWTF	3	223	KAUF
J1	TWTF	4	220	ROSMAN

German 102. ELEMENTARY COURSE:-Continuation of German 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

C1	TWTF	10	221	BRAUNFELD
D1	TWTF	11	221	KAUF
F1	TWTF	1	221	ROSMAN
H1	TWTF	3	221	ROSMAN

German 103. INTERMEDIATE COURSE:-Modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 102, two years of high school German, or equivalent.

B1	TWTF	9	222	TEICHMANN
C1	TWTF	10	222	WILLNER
D1	TWTF	11	222	HARTOCH
E1	TWTF	12	222	WILLNER
F1	TWTF	1	222	VARDAMAN
H1	TT	3	37	HARTOCH
	WF	3	21	HARTOCH

German 104. INTERMEDIATE COURSE:-Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 103, three years of high school German, or equivalent.

B1	TWTF	9	221	BRAUNFELD
E1	TWTF	12	221	KAUF

German 113. PRACTICE IN CONVERSATION:-Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Credit 2 hours. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

R1	TT	1	228	TEICHMANN

HISTORY

Hist. 111. HISTORY OF MODERN WESTERN CIVILIZATION TO 1815:-Europe from the age of the great discoveries to the close of the Napoleonic wars. This course with History 112 meets the Social Science requirement in Liberal Arts and Sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	MW	9	213	NICHOLSON
QUIZ	N1	TT	10	38	NICHOLSON
QUIZ	N2	TT	10	24	GOODMAN
QUIZ	Q1	TT	12	38	NICHOLSON
QUIZ	G1	MW	2	37	GOODMAN
QUIZ	R	TT	1	24	NICHOLSON
QUIZ	H1	MW	3	37	GOODMAN

HIST. 111 (Cont'd)

LEC	P1	TT	11	213	UNFER
QUIZ	A1	MW	8	97	UNFER
QUIZ	M1	TT	9	97	UNFER
QUIZ	C1	MW	10	97	UNFER
QUIZ	R2	TT	1	97	UNFER
QUIZ	H1	MW	3	97	UNFER

Hist. 131. HISTORY OF ENGLAND TO 1688:-A survey of the political and constitutional social and economic, church and cultural, and imperial history of the British people from the beginning of English history through the revolution of 1688. This course with History 132 meets the humanities requirement in Liberal Arts and Sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	213	BILL GOODMAN
QUIZ	M1	TTF	9	37	GOODMAN
QUIZ	N1	TTF	10	37	BILL
QUIZ	P1	TTF	11	37	BILL
QUIZ	R1	TTF	1	37	GOODMAN

Hist. 151. HISTORY OF THE UNITED STATES TO 1865:-Colonial foundations, movement for independence, early years of the Republic. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	C1	M	10	218	S JONES
QUIZ	M1	TT	9	82	RIDDLE
QUIZ	N1	TT	10	82	S JONES
QUIZ	P1	TT	11	97	S JONES

Hist. 152. HISTORY OF THE UNITED STATES FROM 1865 to the PRESENT:- A century of national life and organization. Credit 3 hours. Prerequisite: Sophomore standing.

M1	MTT	9	28	S JONES

Hist. 181. THE ANCIENT WORLD:-Ancient empires and Greece. Credit 3 hours. Prerequisite: Sophomore standing.

C1	MWF	10	28	NICHOLSON

HUMANITIES

Humanities 101. VALUES IN LITERATURE:-A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities. Credit 4 hours.

A1	TWTF	8	217	BLUM
B1	TWTF	9	214	BLUM
C1	TWTF	10	214	JORDAN
D1	TWTF	11	214	RUNYAN
F1	TWTF	1	214	RUNYAN

Humanities 151. THE HERITAGE OF WESTERN CULTURE:- A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. This course, plus Humanities 152, satisfies the general education requirement in the humanities. Credit 4 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	TWTF	10	223	VARDAMAN
E1	TWTF	12	214	VARDAMAN
H1	TWTF	3	214	SCHILLER

HYGIENE

Hygiene 104. PERSONAL AND COMMUNITY HYGIENE:- This course covers basic principles of hygiene. Especally recommended for those going into teaching, occupational therapy, social work, etc. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

A1	WF	8	229	STAFF
L1	TT	8	229	STAFF
N1	TT	10	229	STAFF
P1	TT	11	229	STAFF
Q1	TT	12	229	STAFF
F1	WF	1	229	STAFF
R1	TT	1	229	STAFF
G1	WF	2	229	STAFF

Hygiene 110. PUBLIC HEALTH:- Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P1	TT	11	20	SPIES

MANAGEMENT

Management 101. INDUSTRIAL ORGANIZATION AND MANAGEMENT:-Organization plans, administrative policies, and management problems with special attention to manufacturing units. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	38	GILLETT
D1	MWF	11	21	JUNG
F1	MWF	1	23	GILLETT
H1	MWF	3	22	JUNG

MARKETING

Marketing 101. PRINCIPLES OF MARKETING:-The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

C1	MWF	10	22	KNUDSON
E1	MWF	12	38	KNUDSON

MATHEMATICS

Math. 102. BASIC MATHEMATICS:-Continuation of Mathematics 101. Credit 3 hours. Prerequisite: Mathematics 101.

G1	MWF	2	96	ZIOMEK

Math. 103. INTRODUCTION TO COLLEGE ALGEBRA:- Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Credit 3 hours. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MWF	8	102	ONDRAK
A2	MTWTF	8	94	LUMLEY
A3	MTWTF	8	96	ZYGMUND
A4	MTWTF	8	100	SJOBLOM
B1	MTWTF	9	94	KUZMANIC
B2	MTWTF	9	96	LUMLEY
B3	MTWTF	9	100	REES
B4	MTWTF	9	101	VEDRAL
C1	MWF	10	102	BERGLUND
C2	MTWTF	10	94	SEARS
C3	MTWTF	10	96	ONDRAK
C4	MTWTF	10	100	PATRICELLI

MATH. 103 (Cont'd)

D1	MWF	11	94	VEDRAL
D2	MTWTF	11	96	BERGLUND
D3	MTWTF	11	100	PATRICELLI
E1	MWF	12	102	KUZMANIC
E2	MTWTF	12	94	LINN
E3	MTWTF	12	96	HILL
E4	MTWTF	12	111	MURPHY
F1	MWF	1	76	HENDERLEITER
F2	MTWTF	1	96	GORDON
F3	MTWTF	1	100	DINKINES
F4	MTWTF	1	101	SCHOLOMITI
H1	MTWTF	3	105	OLSEN
H2	MWF	3	96	HENDERLEITER
H3	MTWTF	3	106	LARIVIERE
H4	MTWTF	3	101	WILEY
J1	MWF	4	102	HENDERLEITER
J2	MTWTF	4	96	ZIOMEK
J3	MTWTF	4	100	WILEY
J4	MTWTF	4	101	LINN

Math. 108. ELEMENTARY PLANE GEOMETRY FOR VETERANS:-This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. No credit.

B1	MW	9	37	ZYGMUND
	F	9	28	ZYGMUND
G1	MWF	2	102	ALBERTI

Math. 109. FUNDAMENTALS OF MATHEMATICS:-For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Credit 4 hours. Prerequisite: Consent of the department.

D1	MTWT	11	101	HARTLEY

Math. 112. COLLEGE ALGEBRA:- Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108. Sections marked (*) are open to Commerce students only.

A1	MWF	8	103	PATRICELLI
A2	MWF	8	104	KUZMANIC
B1	MWF	9	103	FRANK
B2	MWF	9	104	BALLARD
C1	MWF	10	103	REES
N1	M	10	80	DINKINES
	TT	10	103	DINKINES
D1	MWF	11	103	CURTIS
*D2	MWF	11	104	KUZMANIC
P1	M	11	80	ONDRAK
	TT	11	103	ONDRAK
E1	MWF	12	103	FEINSTEIN
Q1	M	12	76	OLSEN
	TT	12	103	OLSEN
Q2	M	12	75	SEARS
	TT	12	102	SEARS
F1	MWF	1	103	ALBERTI
*F2	MWF	1	104	NOLAN
R1	M	1	80	PENNISI
	TT	1	103	PENNISI
G1	MWF	2	106	OLSEN
G2	MWF	2	103	MURPHY
*H1	MWF	3	103	LINN
H2	MWF	3	104	ZIOMEK
J1	MWF	4	103	PENNISI

Math. 114. PLANE TRIGONOMETRY:- Identities, equations, addition, formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	102	REES
L2	TT	8	103	PATRICELLI
M1	TT	9	102	ZYGMUND
M2	TT	9	103	NOLAN
M3	TT	9	104	BERGLUND
N1	TT	10	102	NOLAN
N2	TT	10	104	REES
N3	TT	10	101	SJOBLOM
P1	TT	11	102	FEINSTEIN
P2	TT	11	104	CURTIS
Q1	TT	12	101	SJOBLOM
Q2	TT	12	100	HENDERLEITER
R1	TT	1	102	ALBERTI
R2	TT	1	104	LINN
R3	TT	1	105	ZIOMEK
T1	TT	3	102	ZIOMEK
T2	TT	3	103	HENDERLEITER
T3	TT	3	104	HILL
U1	TT	4	102	GORDON
U2	TT	4	103	HILL

Math. 123. ANALYTIC GEOMETRY:- Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 112 and 114.

A1	MTWTF	8	105	SCHOLOMITI
A2	MTWTF	8	106	VEDRAL
B1	MTWTF	9	105	SJOBLOM
B2	MTWTF	9	106	HARTLEY
C1	MTWTF	10	105	BALLARD
C2	MTWTF	10	106	CURTIS
D1	MTWTF	11	105	ZYGMUND
D2	MTWTF	11	106	SEARS
E1	MTWTF	12	104	WILEY
E2	MTWTF	12	105	NOLAN
F1	MTWTF	1	106	LARIVIERE
H1	MTWTF	3	100	GORDON

Math. 133. CALCULUS:- First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Credit 3 hours. Prerequisite: Mathematics 122 or 123.

A1	MWF	8	101	REES
B1	MWF	9	102	ONDRAK
C1	MWF	10	104	FRANK
D1	MWF	11	102	OLSEN
D2	MWF	11	144	FEINSTEIN
E1	MWF	12	100	BERGLUND
F1	MWF	1	105	FRANK
G1	MWF	2	105	GORDON
H1	MWF	3	102	PENNISI

Math. 143. CALCULUS:- Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expension of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Credit 5 hours. Prerequisite: Mathematics 133.

A1	MTWTF	8	111	BALLARD
B1	MTWTF	9	111	FEINSTEIN
C1	MTWTF	10	111	SCHOLOMITI
D1	MTWTF	11	111	MURPHY
E1	MTWTF	12	106	LARIVIERE
F1	MTWTF	1	111	HILL
H1	MTWTF	3	111	ALBERTI

Math. 343. ADVANCED CALCULUS:-Credit 3 hours.

F1	MWF	1	102	CURTIS

Math. 345. DIFFERENTIAL EQUATIONS AND ORTHOGONAL FUNCTIONS:-Credit 3 hours. Prerequisite: Mathematics 133 and 143, or 137 and 147.

C1	MWF	10	101	HARTLEY
D1	MWF	11	134	FRANK
E1	MWF	12	101	DINKINES
G1	MWF	2	101	PENNISI

MECHANICAL ENGINEERING

M. E. 182. MANUFACTURING PROCESSES:-Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Credit 3 hours. Prerequisite: General Engineering 101, sophomore standing.

B1	MWF	9	65	PERKINS
G1	MWF	2	65	PERKINS

M. E. 183. MATERIALS CASTING:-Casting as a process of fabrication; the molding process including machine moulding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Credit 3 hours. Prerequisite: General Engineering 101; sophomore standing.

LEC	C	MF	10	65	SCHROEDER
LEC	F	MF	1	65	SCHROEDER
LAB	A	TU	8/11	71	SCHROEDER
LAB	B	W	11/2	71	SCHROEDER
LAB	C	W	2/5	71	SCHROEDER

M. E. 184. METAL PROCESSING:-Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Credit 3 hours. Prerequisite: General Engineering 101; credit or registration in Integral Calculus and Physics 108.

LEC	M	TT	9	65	PERKINS
LEC	P	TT	11	65	PERKINS
LEC	O	MF	11	65	PERKINS
LAB	A	M	11/2	64	
LAB	B	W	11/2	64	
LAB	C	F	2/5	64	

M. E. 209. THERMODYNAMICS AND HEAT TRANSFER:- Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Credit 3 hours. Prerequisite: Physics 108; Mathematics 142 or 143.

D1	MWF	11	113	COBB

MILITARY SCIENCES AND TACTICS

Mil. Sci. 101. FRESHMAN BASIC DRILL AND THEORY:-Basic military instruction to include: Organization of the Army and ROTC; individual weapons and marksmanship, and leadership, drill and command. Credit 1 hour. Prerequisite: Military Science department approval.

THEORY	1	MW	9	230	CLAMPITT
THEORY	2	TT	9	230	CLAMPITT
THEORY	3	MW	10	230	CLAMPITT
THEORY	4	TT	10	230	CLAMPITT
THEORY	5	MW	11	230	CLAMPITT
THEORY	6	TT	11	230	CLAMPITT
DRILL	1	TU	8	AUD	
DRILL	2	W	8	AUD	
DRILL	3	TH	8	AUD	

Mil. Sci. 103. SOPHOMORE BASIC DRILL AND THEORY:-Basic military instruction to include: Map and aerial photographs; Elementary communications; and Leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 102 or equivalent.

THEORY	1	MW	9	116	CHAMBERS
THEORY	2	TT	9	116	CHAMBERS
THEORY	3	MW	11	116	CHAMBERS
THEORY	4	TT	10	116	CHAMBERS
DRILL	1	TU	8	AUD	
DRILL	2	W	8	AUD	
DRILL	3	TH	8	AUD	

Mil. Sci. 205. JUNIOR ADVANCED INFANTRY DRILL AND THEORY:-Advanced military instruction to include: Leadership, Military Teaching methods; Crew-served weapons and gunnery; Mine Warfare; Field Fortifications; and Leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 103 and 104, successful completion of Armed Forces Qualification test, officer-type physical examination and approval of Military Science department.

THEORY	1	MTWT	12	230
DRILL	1	TU	8	AUD
DRILL	2	W	8	AUD
DRILL	3	TH	8	AUD

M U S I C

**Room 354 is in the South Building of the Pier at the West End. Enter the Building at the South side of the roadway down the center of the Pier.

Music 100. RUDIMENTS OF THEORY:- Notation, scales, intervals, chords, terminology. Credit 2 hours.

D1	MWF	11	**354	FISSINGER

Music 130. INTRODUCTION TO THE ART OF MUSIC, I.:-Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only. Credit 3 hours.

C1	MWF	10	354	FISSINGER

Music 150. MUSIC ENSEMBLE:-Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Credit ½ hour.

A	TT	*2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
C	TT	***11	354	FISSINGER
C	F	3/5	354	

*Band rehearsals often continue for a part or all of the three o'clock hour for students able to arrange their schedules to permit this, but while attendance during the three o'clock hour is desired, it is not required.

***Students unable to arrange to attend Chorus meetings all four hours each week may still participate with the consent of the director. To earn credit, attendance at rehearsals at least two hours weekly is required.

PHILOSOPHY

Phil. 101. INTRODUCTION TO PHILOSOPHY:-Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form and approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	82	MORRIS
N1	TTF	10	97	PAGE
E1	MWF	12	97	PAGE
G1	MWF	2	97	PAGE

Phil. 102. LOGIC:-Reasoning, detection of fallacies, evidence. Credit 3 hours. Prerequisite: Sophomore standing.

N1	TT	10	14	MORRIS
	F	10	16	
P1	TT	11	24	MORRIS
	TH	12	24	
E1	MWF	12	13	MORRIS
F1	MWF	1	28	PAGE

Phil. 105. MORAL IDEAS AND PRACTICE:-Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Q1	TT	12	28	PAGE

PHYSICAL EDUCATION

FOR MEN

* Classes will meet for 1½ hours.
** Classes will meet for 1½ hours; students will be released early to participate in extra-curricular activities.
*** Special conditioning sections.
**** Adaptive only.

P. E. M. 101, 102, 103, 104. PRESCRIBED EXERCISES:- Open only to students who are assigned by the Health Service. Students enrolling for the first time register for P.E.M.101. Students enrolling for the second, third or fourth time register for P.E.M.102, 103, 104 respectively. Credit 1 hour.

C	MWF	10	GYM
D	MWF	11	GYM
E	MWF	12	GYM
F	MWF	1	GYM

P. E. M. 106. DEVELOPMENTAL ACTIVITIES:-Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. Credit 1 hour.

A	MWF	***8	GYM
B	MWF	9	GYM
C	MWF	10	GYM
D1	MWF	11	GYM
D2	MWF	11	GYM
E1	MWF	12	GYM
E2	MWF	12	GYM
F	MWF	1	GYM
G	MWF	2	GYM
H	MWF	***3	GYM

P. E. M. 107. BEGINNING SWIMMING:- For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

MN	TT	*9	YMCA

P. E. M. 109. ADVANCED SWIMMING:- For swimmers (ability to swim at least 100 yards). Students must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

NP	TT	*10	YMCA

P. E. M. 112. INDIVIDUAL TUMBLING STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

B	MWF	9	GYM
C	MWF	10	GYM
NP	TT	*10	GYM
D	MWF	11	GYM
PQ	TT	*11	GYM

P. E. M. 113. DOUBLE TUMBLING STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

G	MWF	2	GYM

P. E. M. 114. APPARATUS STUNTS:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM
D	MWF	11	GYM
E	MWF	12	GYM
QR	TT	*12	GYM
F	MWF	1	GYM
RS	TT	**1	GYM

P. E. M. 117. BOXING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM
E	MWF	12	GYM
QR	TT	*12	GYM
F	MWF	1	GYM
G	MWF	2	GYM

P. E. M. 118. WRESTLING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM
NP	TT	*10	GYM
D	MWF	11	GYM
PQ	TT	*11	GYM
E	MWF	12	GYM
QR	TT	*12	GYM
F	MWF	1	GYM
RS	TT	**1	GYM
G	MWF	2	GYM

P. E. M. 120. PERSONAL DEFENSE ACTIVITIES:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

E	MWF	12	GYM
RS	TT	**1	GYM
H	MWF	3	GYM

P. E. M. 123. WEIGHT LIFTING:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

A	MWF	8	GYM
LM	TT	*8	GYM
B	MWF	9	GYM
MN	TT	*9	GYM
C	MWF	10	GYM
D	MWF	11	GYM
PQ	TT	*11	GYM
E	MWF	12	GYM
F	MWF	1	GYM
G	MWF	2	GYM

P. E. M. 129. VOLLEYBALL:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

LM	TT	*8	GYM
MN	TT	*9	GYM
NP	TT	*10	GYM
PQ	TT	*11	GYM
QR	TT	*12	GYM
RS	TT	**1	GYM
G	MWF	****2	GYM
H	MWF	****3	GYM

P. E. M. 130. BASKETBALL:-Skills, knowledge, attitudes and conditions. Credit 1 hour. Prerequisite: P.E.M. 106 and recommendation of the instructor.

A	MWF	8	GYM
C	MWF	10	GYM
F	MWF	1	GYM

P. E. M. 132. ARCHERY:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

LM	TT	*8	GYM

P. E. M. 136. BADMINTON:-Skills, knowledge, attitudes, and conditions. Credit 1 hour.

LM	TT	*8	GYM
MN	TT	*9	GYM
NP	TT	*10	GYM
PQ	TT	*11	GYM
QR	TT	*12	GYM
RS	TT	**1	GYM

P. E. M. 139. BACKYARD SPORTS:-Skills, knowledge, and conditions. Credit 1 hour.

A	MWF	****8	GYM
B	MWF	****9	GYM
MN	TT	*9	GYM
RS	TT	**1	GYM

P. E. M. 140. BOATING AND FISHING:-Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

NP	TT	*10	GYM
QR	TT	*12	GYM

P. E. M. 143. AMERICAN SQUARE DANCE:-Credit 1 hour.

F	MWF	1	AUD

P. E. M. 150. PROFESSIONAL ORIENTATION:-Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. Credit 2 hours.

D	WF	11	38

P. E. M. 153. FITNESS PROGRAMS:-Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. Credit 2 hours.

A	MTWTF	8/10	GYM

P. E. M. 154. SWIMMING:-Crawl, back, breast, and side strokes; diving; life saving. To be taken with Physical Education for Men 153. Credit 2 hours.

A	MTWTF	8/10	YMCA

P. E. M. 155. GYMNASTICS AND WRESTLING:-Tumbling, apparatus stunts, and wrestling skills. Credit 2 hours.

A	MTWTF	*8/10	GYM

P. E. M. 156. TRACK AND FIELD AND BASEBALL:-Track events, field events, and baseball skills; rules. Credit 2 hours.

A	MTWTF	*8/10	GYM

Recreation 174. CAMP COUNSELING:-Objectives, administration, techniques, activity programs, evaluation. Credit 3 hours.

E	MWF	12	80

PHYSICAL EDUCATION

FOR WOMEN

* Classes will meet for 1½ hours.
** Students will be released early to participate in extra-curricular activities.
*** Adaptive only; special conditioning sections.

P. E. W. 100. CONDITIONING ACTIVITIES:-Credit 1 hour.

PQ	TT	*11	AUD	PESAVENTO
QR	TT	*12	AUD	PESAVENTO
RS	TT	**1	AUD	THOMAS
H	MWF	3	AUD	THOMAS
TU	TT	*3	AUD	THOMAS

P. E. W. 102. MODIFIED ACTIVITIES:-Prescribed recreational sports, relaxation, and exercise. Credit 1 hour. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	***12	AUD	ANZALONE

P. E. W. 105. ELEMENTARY RHYTHMS:-Beginning dance techniques. Credit 1 hour.

B	MWF	9	AUD	CLAYPOOLE
MN	TT	*9	AUD	CLAYPOOLE
C	MWF	10	AUD	CLAYPOOLE
NP	TT	*10	AUD	CLAYPOOLE
D	MWF	11	AUD	CLAYPOOLE
PQ	TT	*11	AUD	CLAYPOOLE

P. E. W. 106. INTERMEDIATE RHYTHMS:-Intermediate dance techniques, solo and group dance compositions. Credit 1 hour. Prerequisite: Physical Education for Women 105 or consent of instructor.

RS	TT	**1	AUD	CLAYPOOLE

P. E. W. 110. ELEMENTARY SWIMMING:-Credit 1 hour.

PQ	TT	*11	YMCA	ANZALONE

P. E. W. 122. SPEEDBALL - VOLLEYBALL:-Credit 1 hour.

C	MWF	10	AUD	ANZALONE

P. E. W. 123. BASKETBALL:-Credit 1 hour.

F	MWF	1	AUD	ANZALONE

P. E. W. 130. BADMINTON:-Personal equipment to be furnished by student.. Credit 1 hour.

G	MWF	2	AUD	ANZALONE

P. E. W. 140. BOATING AND FISHING:-Open to students who have completed two semesters of physical education, or consent of instructor. Credit 1 hour.

PQ	TT	*11	AUD	THOMAS

P. E. W. 141. TUMBLING AND APPARATUS STUNTS:-The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and co-ordination on on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. Credit 1 hour.

MN	TT	*9	AUD	ANZALONE

P. E. W. 143. AMERICAN SQUARE DANCE:-Credit 1 hour.

F	MWF	1	AUD	THOMAS

P. E. W. 144. ELEMENTARY FOLK DANCE:-Credit 1 hour.

E	MWF	12	AUD	BARTON

P. E. W. 150. PROFESSIONAL ORIENTATION:-Credit 2 hours.

A	MW	8	251	PESAVENTO

P. E. W. 151. BODY MECHANICS, GYMNASTICS AND HOCKEY:-Credit 2 hours. For Physical Education majors.

B	MTWTF	9	AUD	PESAVENTO

P. E. W. 153. SOCCER, SPEEDBALL AND VOLLEYBALL:- Credit 1 hour. For Physical Education majors.

C	MTWTF	10	AUD	PESAVENTO

PHYSICAL SCIENCES

Phys. Sci. 101. INTRODUCTION TO THE PHYSICAL SCIENCES:-A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in general chemistry, physics, or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	M	TT	9	204	MELOY
LAB	1	TU	10/1	85	COWIN
QUIZ	1	TH	10	74	COWIN
LAB	2	W	9/12	85	COWIN
QUIZ	2	F	9	74	COWIN
LAB	3	W	2/5	85	COWIN
QUIZ	3	M	3	74	COWIN
LAB	4	TH	10/1	85	MILLER
QUIZ	4	M	9	75	MILLER
LAB	5	TH	3/6	85	MILLER
QUIZ	5	TU	3	76	MILLER
LAB	6	F	9/12	85	MILLER
QUIZ	6	W	9	74	MILLER
LAB	7	F	1/4	85	COWIN
QUIZ	7	M	1	75	COWIN

Phys. Sci. 102. INTRODUCTION TO THE PHYSICAL SCIENCES:-A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in general chemistry, physics, or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101.

LEC	B	WF	9	204	MELOY
LAB	11	M	9/12	85	MELOY
QUIZ	11	F	11	75	MELOY
LAB	12	M	2/5	85	DEMAR
QUIZ	12	W	2	76	DEMAR

PHYSICS

Physics 101. GENERAL PHYSICS (MECHANICS, HEAT, SOUND):- Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Trigonometry.

LEC	X	TU	11	127	LIVERMORE
LEC	Y	TU	1	127	WILBUR
QUIZ	C1	MWF	10	134	WILBUR
LAB	C	TH	8/11	117	WILBUR
QUIZ	E1	MWF	12	134	LIVERMORE
LAB	E	TH	11/2	117	LIVERMORE
QUIZ	F1	MWF	1	134	WILBUR
LAB	F	TU	3/6	117	WILBUR
QUIZ	H1	MWF	3	134	LIVERMORE
LAB	H	TH	3/6	117	LIVERMORE

Physics 102. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS:-Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Physics 101.

LEC	X	TH	11	127	JOHNSON
QUIZ	C1	MWF	10	113	JOHNSON
LAB	C	TU	8/11	124	JOHNSON
QUIZ	E1	MWF	12	113	JOHNSON
LAB	E	TH	3/6	124	JOHNSON

Physics 106. GENERAL PHYSICS (MECHANICS):-Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Credit or registration in Mathematics 133.

LEC	X	M	10	127	SKADELAND
LEC	Y	M	1	127	SILKETT
QUIZ	A1	WF	8	134	TSAO
LAB	A	TH	8/11	123	TSAO
QUIZ	M1	TT	9	134	MORAINE
LAB	M	F	8/11	123	MORAINE
QUIZ	C1	WF	10	144	TSAO
LAB	C	TU	8/11	123	TSAO
QUIZ	P1	TT	11	134	ANDERSON
LAB	P	F	12/3	123	ANDERSON
QUIZ	E1	WF	12	144	MORAINE
LAB	E	W	8/11	123	MORAINE
QUIZ	F1	WF	1	144	SKADELAND
LAB	F	TH	11/2	123	SKADELAND
QUIZ	R1	TT	1	134	SILKETT
LAB	R	W	12/3	123	SILKETT
QUIZ	H1	WF	3	144	SILKETT
LAB	H	TH	3/6	123	SILKETT

Physics 107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS):-Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	W	10	127	ANDERSON
LEC	Y	W	1	127	PAPPADEMOS
QUIZ	B1	MF	9	134	RAILSBACK
LAB	B	TH	8/11	124	RAILSBACK

PHYSICS 107 (Cont'd)

QUIZ	M1	TT	9	144	ANDERSON
LAB	M	M	8/11	124	ANDERSON
QUIZ	N1	TT	10	144	PAPPADEMOS
LAB	N	F	8/11	124	PAPPADEMOS
QUIZ	P1	TT	11	113	WEISSMAN
LAB	P	M	3/6	124	WEISSMAN
QUIZ	R1	TT	1	144	MCNEIL
LAB	R	M	12/3	124	MCNEIL
QUIZ	H1	MF	3	110	SKADELAND
LAB	H	TU	3/6	124	SKADELAND

Physics 108. GENERAL PHYSICS (HEAT, SOUND, LIGHT):- Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	F	10	127	WEISSMAN
LEC	Y	F	1	127	MCNEIL
QUIZ	L1	TT	8	134	PAPPADEMOS
LAB	L	M	8/11	122	PAPPADEMOS
QUIZ	B1	MW	9	144	WEISSMAN
LAB	B	TU	8/11	122	WEISSMAN
QUIZ	N1	TT	10	134	MCNEIL
LAB	N	W	8/11	122	MCNEIL
QUIZ	Q1	TT	12	134	TSAO
LAB	Q	M	12/3	122	TSAO
QUIZ	R1	TT	1	113	CHANDLER
LAB	R	M	3/6	122	CHANDLER

Physics 341. ELECTRICITY AND MAGNETISM:-Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Credit 4 hours. Prerequisite: General physics and calculus.

QUIZ	G1	MWF	2	208	CHANDLER
LAB	G	TH	3/6	208	CHANDLER

POLITICAL SCIENCE

Pol. Sci. 103. INTRODUCTION TO POLITICAL SCIENCE:-A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. Credit 3 hours.

E1	MWF	12	28	GABIS

Pol. Sci. 104. INTRODUCTION TO INTERNATIONAL POLITICS:-This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. Credit 3 hours.

F1	MWF	1	97	BARBER

Pol. Sci. 150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS:-Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	97	BARBER
C1	MWF	10	82	GABIS
E1	MWF	12	37	BARBER
Q1	TT	12	17	GABIS
	TU	1	17	GABIS
H1	MWF	3	28	BARBER

Pol. Sci. 151. AMERICAN GOVERNMENT: FUNCTIONS:-Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Credit 3 hours. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

F1	MW	1	37	GABIS
	F	1	38	

PSYCHOLOGY

Psych. 100. INTRODUCTION TO PSYCHOLOGY:-Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Credit 4 hours. Prerequisite: Second semester freshman standing.

LEC	B1	WF	9	218	HOWARD
QUIZ	M1	TT	9	18	HOWARD
QUIZ	C1	WF	10	19	HOWARD
QUIZ	N1	TT	10	18	HOWARD
QUIZ	D1	WF	11	22	HOWARD
QUIZ	P1	TT	11	18	V LIPMAN
QUIZ	Q1	TT	12	18	TYROLER

LEC	Q1	TT	12	218	E LIPMAN
QUIZ	D2	WF	11	23	V LIPMAN
QUIZ	E1	WF	12	23	V LIPMAN
QUIZ	R1	TT	1	23	V LIPMAN
QUIZ	H1	WF	3	23	V LIPMAN
QUIZ	T1	TT	3	22	V LIPMAN

Psych. 125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY:-An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Credit 4 hours. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

LEC	C1	WF	10	213	E LIPMAN
QUIZ	M1	TT	9	23	TYROLER
QUIZ	N1	TT	10	23	E LIPMAN
QUIZ	P1	TT	11	21	TYROLER

RHETORIC

Rhet. 100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION:- Intensive review of fundamentals, with considerable practice in composition. Open to students who fail the placement test for admission to Rhetoric 101. Students passing this course will be admitted to Rhetoric 101 without further examination. Admission to sections marked (*) requires consent of the Division of Humanities. No credit.

A1	MWF	8	201	DAVIS
A2	MWF	8	202	KENNY
B1	MWF	9	202	LEONHARD
M1	MTT	9	205	NICHOLAS
M2	M	9	223	S MILLER
	TT	9	203	S MILLER
*C1	MTWTF	10	201	HOSKINS-KIRSTEIN
C2	MWF	10	202	KENNY
*D1	MTWTF	11	201	HOSKINS-KIRSTEIN
P1	MTT	11	202	TIMMIS
P2	M	11	229	CARLSON
	TT	11	206	CARLSON
E1	MWF	12	201	HEGIE
E2	MWF	12	203	HELMER
E3	MWF	12	202	KENNY
E4	MWF	12	216	LEONHARD
Q1	MTT	12	224	TIMMIS

RHET. 100 (Cont'd)

*F1	MTWTF	1	201	KIRSTEIN HOSKINS
F2	MWF	1	202	KENNY
R1	MTT	1	203	S MILLER
R2	MTT	1	205	STAR
R3	MTT	1	94	CARLSON
G1	MWF	2	201	HELMER
T1	MTT	3	201	STAR
J1	MWF	4	201	HEGIE
J2	MWF	4	202	HELMER
J3	MWF	4	203	MCNAMARA
J4	MWF	4	205	WILLETT

Rhetoric 101. FRESHMAN RHETORIC AND COMPOSITION:-This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

A1	MWF	8	203	ATWOOD
L1	MTT	8	205	KARANIKAS
L2	MTT	8	206	KOGAN
L3	MTT	8	209	MUNRO
L4	MTT	8	219	NICHOLAS
B1	MWF	9	203	DAVIS
B2	MWF	9	211	MACKIN
B3	M	9	229	I MILLER
	WF	9	209	I MILLER
B4	M	9	226	ATWOOD
	WF	9	201	ATWOOD

RHET. 101 (Cont'd)

M1	MTT	9	206	JACKMAN
M2	M	9	227	KARANIKAS
	TT	9	211	KARANIKAS
M3	M	9	224	KOGAN
	TT	9	212	KOGAN
M4	M	9	225	MUNRO
	TT	9	215	MUNRO
M5	MTT	9	201	STRONKS
C1	MWF	10	215	ATWOOD
C2	MWF	10	219	DAVIS
C3	M	10	220	I MILLER
	WF	10	229	I MILLER
C4	M	10	224	LEONHARD
	WF	10	203	LEONHARD
C5	M	10	227	MACKIN
	WF	10	209	MACKIN
N1	M	10	221	GRIEST
	TT	10	215	GRIEST
N2	M	10	222	KARANIKAS
	TT	10	205	KARANIKAS
N3	M	10	225	S MILLER
	TT	10	212	S MILLER
D1	MWF	11	205	WILLETT
D3	M	11	222	GALLAGHER
	WF	11	203	GALLAGHER
D4	MWF	11	206	GREENWALD
D5	M	11	221	BLUM
	WF	11	219	BLUM

RHET. 101 (Cont'd)

P1	MTT	11	203	JORDAN
P2	M	11	228	NICHOLAS
	TT	11	205	NICHOLAS
E1	MWF	12	225	MCNAMARA
E2	MWF	12	229	COX
E3	M	12	220	KERWICK
	WF	12	224	KERWICK
Q1	M	12	226	STAR
	TT	12	205	STAR
Q2	M	12	223	STRONKS
	TT	12	201	STRONKS
F1	M	1	214	BLUM
	WF	1	216	BLUM
F2	M	1	220	MACKIN
	WF	1	217	MACKIN
F3	M	1	221	J JOHNSON
	WF	1	211	J JOHNSON
F4	M	1	222	I MILLER
	WF	1	205	I MILLER
F5	M	1	223	WILLETT
	WF	1	203	WILLETT
F6	M	1	224	F JOHNSON
	WF	1	206	F JOHNSON
R1	M	1	226	GRIEST
	TT	1	202	GRIEST
R2	M	1	227	HIPPLE
	TT	1	212	HIPPLE
R3	M	1	94	JORDAN
	TT	1	219	JORDAN

RHET. 101 (Cont'd)

G1	MWF	2	202	CRAWLEY
G2	MWF	2	203	FREYER
G3	MWF	2	206	GALLAGHER
G4	MWF	2	209	GREENWALD
G5	MWF	2	220	HEGIE
G6	MWF	2	221	J JOHNSON
G7	MWF	2	222	MCNAMARA
G8	MWF	2	223	RUNYAN
G9	MWF	2	224	DAVIS
G10	MWF	2	227	F JOHNSON
H1	MWF	3	202	COX
H2	MWF	3	203	CRAWLEY
H3	MWF	3	206	FREYER
H4	MWF	3	209	GALLAGHER
H5	MWF	3	211	HEGIE
H6	M	3	223	J JOHNSON
H7	MWF	3	201	MCNAMARA
H8	M	3	226	RUNYAN
	WF	3	216	RUNYAN
H9	M	3	224	KERWICK
	WF	3	212	KERWICK
T1	M	3	227	LOVE
	TT	3	203	LOVE
T2	M	3	221	TIMMIS
	TT	3	205	TIMMIS
J1	MWF	4	206	COX
J2	MWF	4	209	CRAWLEY

RHET. 101 (Cont'd)

J3	MWF	4	212	GREENWALD
J4	MWF	4	214	KERWICK
U1	MTT	4	216	HIPPLE
U2	MTT	4	219	STAR
U3	MTT	4	221	TIMMIS

Rhetoric 102. FRESHMAN RHETORIC AND COMPOSITION:-This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	222	WRIGHT
L1	MTT	8	223	GRIEST
B1	M	9	214	WRIGHT
	WF	9	205	WRIGHT
C1	MWF	10	206	VEST
P1	M	11	214	LOVE
	TT	11	209	LOVE
P2	M	11	226	CASSELL
	TT	11	216	CASSELL
E1	M	12	214	SCHILLER
	WF	12	206	SCHILLER
Q1	M	12	221	CASSELL
	TT	12	209	CASSELL
Q2	M	12	222	HIPPLE
	TT	12	215	HIPPLE
F1	M	1	229	WEISS
	WF	1	209	WEISS

RHET. 102 (Cont'd)

G1	MWF	2	226	RUDIN
H1	MWF	3	222	HELMER
H2	MWF	3	229	WEISS
H3	MWF	3	228	RUDIN
T1	M	3	214	CASSELL
	TT	3	215	CASSELL
T2	MTT	3	220	CARLSON
U1	MTT	4	225	LOVE
U2	MTT	4	226	CARLSON
J1	MWF	4	222	GALLAGHER
J2	MWF	4	224	RUDIN

Rhet. 133. PRINCIPLES OF COMPOSITION:- Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit 3 hours. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

C1	M	10	214	FREYER
	WF	10	211	FREYER

Rhetoric 143. INTERMEDIATE EXPOSITORY WRITING:-Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit 3 hours. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

E1	M	12	228	RUDIN
	WF	12	217	RUDIN

Rhetoric 151. BUSINESS LETTER WRITING:-Credit 3 hours. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

C1	MWF	10	205	OLEKSY
P1	M	11	224	MUNRO
	TT	11	215	MUNRO
E1	MWF	12	205	OLEKSY
Q1	M	12	227	MUNRO
	TT	12	202	MUNRO
G1	MWF	2	205	OLEKSY
H1	MWF	3	205	OLEKSY

SOCIAL SCIENCES

Soc. Sci. 111. THE INDIVIDUAL IN SOCIETY:-A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	MW	2	218	BOLTON
QUIZ	M1	TT	9	20	BOLTON
QUIZ	P1	TT	11	17	BOLTON
QUIZ	Q1	TT	12	20	BOLTON
QUIZ	H1	MW	3	14	BOLTON

Soc. Sci. 112. BASES OF AMERICAN LIFE:-A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	218	BILL
QUIZ	P1	MTT	11	82	RIDDLE
QUIZ	R1	MTT	1	82	S JONES
QUIZ	G1	MWF	2	82	BILL

Soc. Sci. 113. WORLD PATTERNS AND WORLD PROBLEMS:-A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	M	9	218	COLBY
QUIZ	M1	TTF	9	14	COLBY
QUIZ	C1	MWF	10	14	CUTSHALL
QUIZ	P1	TT	11	14	COLBY
QUIZ		TH	12	14	COLBY

Soc. Sci. 116. FAMILY LIVING:-The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Credit 4 hours. Prerequisite: Sophomore standing or consent of instructor.

LEC	D1	WF	11	218	STAFF
QUIZ	B1	WF	9	19	KLASSEN
QUIZ	P1	TT	11	19	E LIPMAN

SOCIOLOGY

Sociol. 100. INTRODUCTION TO SOCIOLOGY:-Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	28	CORLEY
P1	TT	11	16	CORLEY
	TH	12	16	CORLEY
G1	MWF	2	28	KLASSEN
H1	MWF	3	82	KLASSEN

Sociol. 130. SOCIETY AND INDIVIDUAL DEVELOPMENT:-Nature of person and relation to institutions, social order, and development. Credit 3 hours. Prerequisite: Sociology 100.

C1	MW	10	37	CORLEY
	F	10		

Sociol. 276. SOCIOLOGY OF THE CITY:-Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

F1	MWF	12	251	KLASSEN
E2	MWF	12	82	CORLEY

SPANISH

Spanish 101. ELEMENTARY SPANISH:-For students who have no credit in Spanish. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

A1	TWTF	8	227	TORT
B1	TWTF	9	229	TORT
C1	TWTF	10	216	PATLOGAN
D1	TWTF	11	227	PATLOGAN
F1	TWTF	1	227	MARSH
H1	TWTF	3	227	MARSH

Spanish 102. ELEMENTARY SPANISH:-Continuation of Spanish 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

B1	TWTF	9	227	PATLOGAN

Spanish 103. INTERMEDIATE SPANISH:-Rapid reading, review of grammar, composition, conversation. Credit 4 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

B1	TWTF	9	225	SANCHEZ
C1	TWTF	10	227	MARSH
F1	TWTF	1	225	PATLOGAN

Spanish 104. INTERMEDIATE SPANISH:-Continuation of Spanish 103. Credit 4 hours. Prerequisite: Spanish 103 or three years of high school Spanish.

C1	TWTF	10	225	SANCHEZ
F1	TWTF	12	227	MARSH

Spanish 113. ELEMENTARY COMPOSITION AND CONVERSATION:-Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Credit 2 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

P1	TT	11	225	SANCHEZ

Spanish 201. INTRODUCTION TO SPANISH LITERATURE:-Reading of modern authors of Spain and Spanish America. Credit 3 hours. Prerequisite: Spanish 104 or four years of high school Spanish.

D1	MWF	11	225	SANCHEZ

S P E E C H

GROUP REMEDIAL SPEECH:- Students with articulatory problems, particularly those with foreign accents, may register for this course at the Student Counseling Service, Room 303, in advance of the dates specified. No credit. Prerequisite: Consent of the instructor.

Sept. 24 - Nov. 7 B1 ——————— Nov. 12 - Jan 9 D1

B1	WF	9	300	HOSKINS
D1	WF	11	202	HOSKINS

Speech 101. PRINCIPLES OF EFFECTIVE SPEAKING:-Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

B1	MWF	9	217	THOMPSON
M1	MTT	9	209	ARMOLD
M2	MTT	9	219	HOVDE
C1	MWF	10	217	THOMPSON
N1	MTT	10	209	HOVDE
D1	M	11	227	HOVDE
	WF	11	229	
D2	MWF	11	211	ARMOLD
P1	M	11	223	PITT
	TT	11	212	PITT
P2	MTT	11	219	CREWS
E1	MWF	12	219	CREWS
E2	MWF	12	211	ARMOLD
Q1	MTT	12	217	GOULSON

SPEECH 101 (Cont'd)

F1	MWF	1	219	HOVDE
F2	MWF	1	212	ARMOLD
R1	MTT	1	209	PITT
G1	MWF	2	219	CREWS
G2	MWF	2	217	HOVDE
H1	MWF	3	217	
H2	MWF	3	219	CREWS
J1	MWF	4	217	

Speech 105. VOICE AND ARTICULATION:-A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

B1	M	9	220	RIGLER
	WF	9	219	RIGLER
E1	MWF	12	209	HOSKINS

Speech 107. PARLIAMENTARY PROCEDURE:-Principles and practice of parliamentary procedure. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	217	HOVDE

Speech 111. BUSINESS AND PROFESSIONAL SPEAKING:-Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

M1	TT	9	217	PITT

Speech 117. ARGUMENTATION:-Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Credit 3 hours. Prerequisite: Speech 101; sophomore standing.

D1	MWF	11	217	THOMPSON

Speech 141. ORAL INTERPRETATION OF LITERATURE:-Principles of interpretation, analysis, and oral reading of prose literature and verse. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	219	ARMOLD
P1	TT	11	217	GOULSON
Q1	TT	12	219	CREWS

Speech 161. FUNDAMENTALS OF ACTING:-A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Credit 3 hours. Prerequisite: Speech 141.

R1	MTT	1	217	GOULSON

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. ANALYTICAL MECHANICS (STATICS):-Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic states, forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. Credit 2 hours. Prerequisite: Registration in Mathematics 143.

T1	TT	3	110	WIESINGER

T. A. M. 151. ANALYTICAL MECHANICS (STATICS):-Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Credit 3 hours. Prerequisite: Registration in Math. 143.

D1	MWF	11	110	PABARCIUS
G1	MWF	2	134	

T. A. M. 154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):-A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. Credit 4 hours. Prerequisite: Registration in Mathematics 143.

C1	MWTF	10	110	PABARCIUS
H1	MTWF	3	113	

T. A. M. 156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS):-A combination of Theoretical and Applied Mechanics 150 and 211. Credit 5 hours. Prerequisite: Registration in Mathematics 143.

E1	MTWTF	12	110	COBB

T. A. M. 171. ELEMENTS OF MECHANICS (STATICS):-Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.;forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Credit 3 hours. Prerequisite: Mathematics 123.

G1	MWF	2	110	WIESINGER

T. A. M. 172. STRENGTH OF MATERIALS:-Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 171.

J1	MWF	4	110	WIESINGER

T. A. M. 211. ANALYTICAL MECHANICS (DYNAMICS):-Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

B1	MWF	9	110	
F1	MWF	1	113	COBB

T. A. M. 221. ELEMENTARY MECHANICS OF DEFORMABLE BODIES:-Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

A1	MWF	8	110	PABARCIUS
F1	MWF	1	110	WIESINGER

T. A. M. 223. MECHANICAL BEHAVIOR OF SOLIDS:-Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Credit 1 hour. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	TU	8/10	61	PABARCIUS
B	TH	12/2	61	
C	M	2/4	61	
D	W	12/2	61	

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TIME TABLE

SECOND SEMESTER

1958-1959

THE LIBRARY OF THE
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UNIVERSITY OF ILLINOIS

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Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 2
Instructions for Registration..... 3
Registration Schedule, Second Semester..... 5
Schedule of Tuition and Fees..... 6
Calendar, Second Semester..... 7
Chicago Undergraduate Division Calendar 8
Urbana Calendar..... 9
Accountancy..... 10
Anthropology..... 11
Architecture..... 11
Art..... 13
Biological Sciences..... 15
Business Law..... 19
Chemistry..... 19
Civil Engineering..... 26
Economics..... 26
Education..... 29
Electrical Engineering..... 29
English..... 30
French..... 32
General Engineering..... 33
Geography..... 35
Geology..... 36
German..... 37
History..... 39
Humanities..... 40
Hygiene..... 41
Management..... 41
Marketing..... 41
Mathematics..... 42
Mechanical Engineering..... 46
Military Sciences and Tactics..... 47
Music..... 48
Pharmacy..... 49
Philosophy..... 49
Physical Education for Men..... 50
Physical Education for Women..... 54
Physical Sciences..... 57
Physics..... 58
Political Science..... 61
Psychology..... 62
Rhetoric..... 63
Social Sciences..... 70
Sociology..... 71
Spanish..... 71
Speech..... 72
Theoretical and Applied Mechanics..... 75

PRE-REGISTRATION ADVISEMENT SCHEDULE
SECOND SEMESTER 1958-59

PLACE: South wing, second floor, Navy Pier.

Use the south wing entrance.

COMMERCE AND ENGINEERING — FORMER STUDENTS ONLY

A - E	Monday, February 2	1 - 4 p.m.
F - K	Tuesday, February 3	9 - 12 noon
L - Q	Tuesday, February 3	1 - 4 p.m.
R - Z	Wednesday, February 4	9 - 12 noon

LIBERAL ARTS AND SCIENCES — FORMER STUDENTS

A - E	Monday, February 2	1 - 4 p.m.
F - K	Tuesday, February 3	9 - 12 noon
L - Q	Tuesday, February 3	1 - 4 p.m.
R - Z	Wednesday, February 4	9 - 12 noon

NEW STUDENTS (LIBERAL ARTS ONLY)

A - E	Wednesday, February 4	1 p.m.
F - H	Wednesday, February 4	2 p.m.
I - N	Wednesday, February 4	3 p.m.
O - Z	Wednesday, February 4	4 p.m.

PHYSICAL EDUCATION:

No pre-advisement is scheduled for Physical Education Majors.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's Copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

No. 2 DEAN'S PROGRAM CARD

4. After the No. 2 card has been made out by your adviser and he has signed the No. 2 card. You may write your address and telephone number on the front of the No. 2 card Dean's Program card. Turn card over and complete the back of this card in ink. Print Plainly.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program Card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in box provided (further indicated by arrows) but do not write your name on these cards. Stop at Area I and fill in the necessary information on all your cards to complete your registration.

No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and LEFT margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4, Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with program on the No. 2, Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1, Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2, and then proceed to Station No. 3 for class card check.

11. All veterans stop at Station 4.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

12. Submit all cards to the Recorder's fee card clerks at Station 5 and obtain a No. 6 Fee Assessment Card and a No. 7 Fee Receipt Card. Write your name and address on the No. 7 Identification Card.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 5, go to Station 6.

14. Place cards No. 6 and No. 7 behind No. 1 through No. 5 and present all cards to the clerks at Station 7. Your cards should be presented banded in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, keep No. 6 and No. 7 separate.

15. If you are registering in R.O.T.C., report to Station 8.

16. Present cards No. 6, 7, and 4, (if applicable) to one of the cashiers and pay your fees. Do not present cards No. 1, 2, 3, and 5 to cashiers. The No. 7 Fee Receipt Card and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to the clerks at Station 12 in the following sequence: No. 7, 1, 2, 3, all No. 5 cards, and No. 4, if applicable. The clerks at this station will return only the No. 7 card to you. From this station proceed to the various stations for your insurance policy, University locker, and other University activities.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

REGISTRATION SCHEDULE
Second Semester, Spring, 1958-59

PLACE

South wing, second floor, Navy Pier.

Use the south wing entrance.

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, February 6, 1959, will be assessed a late registration fee of $5.00.

A - B	Thursday, February 5	10:30 a.m.
E - G	Thursday, February 5	2:00 p.m.
H - K	Thursday, February 5	9:30 a.m.
L - M	Thursday, February 5	11:30 a.m.
N - R	Thursday, February 5	8:30 a.m.
S	Thursday, February 5	3:00 p.m.
T - Z	Friday, February 6	1:00 p.m.
C - D	Friday, February 6	8:30 a.m.

NEW STUDENTS

A - D	Friday, February 6	11:30 a.m.
E - K	Friday, February 6	1:00 p.m.
L - R	Friday, February 6	10:30 a.m.
S - Z	Friday, February 6	9:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m., Friday, February 6.

All University offices will be closed on Saturday, February 7, 1959.

Late registration will begin on Monday, Feburary 9, 1959.

Instruction will begin on Monday, February 9, 1959.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more.....$ 75.00
(Eight hours or less pay tuition at rate of $6.00 a semester hour).

Non-residents of Illinois taking nine hours or more.....$250.00
(Eight hours or less pay tuition at rate of $20.00 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours.....$ 7.00
(Less than five hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours.....$ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours.....$ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All former students who are being readmitted and who were not in residence at the Chicago Undergraduate Division during the First Semester 1958-59 must pay a General Deposit of.....$ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed the first day of late registration, Monday, February 9, 1959.

Late registration fee.....$ 5.00

CHICAGO UNDERGRADUATE DIVISION
CALENDAR

Second Semester, Spring, 1959

Fri., Jan. 30 - Wed., Feb. 7	Orientation Period
Thurs., Feb. 5 - Fri., Feb. 6	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, Feb. 6, for registration)
Mon., Feb. 9	Instruction Begins
Tues., Feb. 10, 9:30 a.m.	Changes to adjust conflicts in program.
Thurs., Feb. 12, 1:00 p.m.	Earliest time at which program changes may be made for personal convenience.
Fri., Feb. 20, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Mon., Mar. 2	University Day (University opened 1868-not a holiday)
Thurs., Mar. 26, 6:00 p.m.	Easter Vacation Begins.
Wed., Apr. 1, 8:00 a.m.	Easter Vacation Ends.
Fri., Apr. 3, 12:00 noon	Mid-semester grades are due.
Fri., Apr. 3, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Fri., Apr. 30, 4:00 p.m.	Students withdrawing on or after this date must petition for re-admission.
Fri., May 8	Honors Day
Fri., May 8, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for Military Withdrawals.
Thurs., May 28 - Fri., Jun. 5	Semester Examinations
Fri., May 29	Holiday (Sat., May 30, Memorial Day)

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1959

SECOND SEMESTER (Spring 1959)

Jan. 30, Fri. - Feb. 4, Wed.	Orientation Period
Feb. 5, Thurs. - Feb. 6, Fri.	Registration
Feb. 9, Mon.	Instruction Begins
Mar. 2, Mon.	University Day (University opened, 1868-- Not a holiday)
Mar. 26, Thurs., 6 p.m.	Easter Vacation Begins
Apr. 1, Wed., 8 a.m.	Easter Vacation Ends
May 8, Fri.	Honors Day
May 28, Thurs. - June 5, Fri.	Semester Examinations
May 29, Fri.	Holiday (Sat., May 30, Memorial Day)

SUMMER SESSION 1959

June 19, Fri.	Registration
June 22, Mon.	Instruction Begins
July 4, Sat.	Independence Day (Holiday)
Aug. 14, Fri.	Summer Session Examinations

FIRST SEMESTER (Fall 1959)

Sept. 9, Wed. - Sept. 16, Wed.	Orientation Period
Sept. 17, Thurs. - Sept. 18, Fri.	Registration
Sept. 21, Mon.	Instruction Begins
Nov. 25, Wed., 6 p.m.	Thanksgiving Vacation Begins
Nov. 30, Mon., 8 a.m.	Thanksgiving Vacation Ends
Dec. 3, Thurs.	Illinois Day (State admitted to Union, 1818--Not a holiday)
Dec. 18, Fri., 6 p.m.	Christmas Vacation Begins
Jan. 4, Mon., 8 a.m.	Christmas Vacation Ends
Jan. 15, Fri. - Jan. 22, Fri.	Semester Examinations

UNIVERSITY OF ILLINOIS
URBANA

CALENDAR 1959

SECOND SEMESTER (Spring 1959)

Jan. 27, Tues. - Jan. 30, Fri.	Entrance Examinations
Feb. 2, Mon. - Feb. 4, Wed.	Registration
Feb. 5, Thurs.	Instruction Begins
Mar. 2, Mon.	University Day (University opened, 1868)
Mar. 25, Wed., 1 p.m.	Spring Vacation Begins
Mar. 30, Mon., 1 p.m.	Spring Vacation Ends
May 1, Fri.	Honors Day (Classes dismissed at noon)
May 26, Tues.	Study Day, classes dismissed
May 27, Wed. - June 5, Fri.	Semester Examinations
May 30, Sat.	Memorial Day (Holiday)
June 13, Sat.	Commencement Exercises

SUMMER SESSION 1959

June 2, Tues. - June 5, Fri.	Entrance Examinations
June 15, Mon.	Registration
June 16, Tues.	Instruction Begins
July 4, Sat.	Independence Day (Holiday)
Aug. 7, Fri. - Aug. 8, Sat.	Summer Session Examination

FIRST SEMESTER (Fall 1959)

Sept. 8, Tues. - Sept. 11, Fri.	Entrance Examination
Sept. 14, Mon. - Sept. 11, Fri.	Freshman Week & Registration
Sept. 21, Mon.	Instruction Begins
Nov. 25, Wed., 1 p.m.	Thanksgiving Vacation Begins
Nov. 30, Mon., 1 p.m.	Thanksgiving Vacation Ends
Dec. 3, Thurs.	Illinois Day (State admitted to Union, 1818)
Dec. 19, Sat., 1 p.m.	Christmas Vacation Begins
Jan. 4, Mon., 8 a.m.	Christmas Vacation Ends
Jan. 21, Thurs.	Study Day, classes dismissed
Jan. 22, Fri. - Jan. 30, Sat.	Semester Examinations

Accy. 101. Principles of Accounting. Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	21	LIPKIN
C1	MWF	10	21	LIPKIN
E1	MWF	12	18	MALINOSKY
F1	MWF	1	21	ANDREWS
G1	MWF	2	21	HEDISH
H1	MWF	3	23	ANDREWS
J1	MWF	4	24	HEDISH
M1	MTT	9	20	MORICI
P1	MTT	11	21	MORICI
R1	MTT	1	18	MALINOSKY
T1	MTT	3	19	MALINOSKY

Accy. 105. Accounting Procedure. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

B1	MWF	9	22	SCHNEIDER
C1	MWF	10	22	SCHNEIDER
D1	MWF	11	22	HEDISH
E1	MWF	12	22	HEDISH
E2	MWF	12	23	LIPKIN
F1	MWF	1	22	SCHNEIDER
G1	MWF	2	24	KABBES
H1	MWF	3	21	LIPKIN
N1	MTT	10	38	ANDREWS
Q1	MTT	12	21	ANDREWS
T1	MTT	3	18	MORICI
U1	MTT	4	18	MORICI

Accy. 106. Elementary Cost Accounting. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	23	KABBES
C1	MWF	10	23	KABBES
F1	MWF	1	38	FOX
H1	MWF	3	24	FOX

Accy. 108. Intermediate Accounting. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

C1	MWF	10	17	MALINOSKY
E1	MWF	12	38	KABBES
G1	MWF	2	22	SCHNEIDER

ANTHROPOLOGY

Anthrop. 103. Introduction to Anthropology: The Growth of Culture. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. Credit 3 hours. II.

R1	TU	12	38	WARREN
	TT	1	38	WARREN
T1	MTT	3	14	WARREN

ARCHITECTURE

Arch. 101. Introduction to Architecture. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107. Credit 3 hours.

LEC	D	W	11	251
LAB	A	MTTF	8/10	241
LAB	B	MTTF	10/12	241
LAB	C	MTTF	12/2	241
LAB	D	MTTF	3/5	241
LAB	E	MTTF	12/2	241

Arch. 113. History of Ancient Architecture. A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Credit 2 hours. Prerequisite: Architecture 131 or sophomore standing.

LEC	D	MF	11	251

Arch. 131. Architectural Design. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Credit 3 hours. Prerequisite: Sophomore standing, Arch. 101, credit or registration in G.E. 108, and registration in Arch. 141.

LEC	G	W	2	251
LAB	A	TT	8/11	241
		W	9/11	241
LAB	B	MF	2/5	241
		W	3/5	241

Arch. 132. Architectural Design. Continued study of the fundamentals of architectural design. Credit 3 hours. Prerequisite: Architecture 131.

LEC	F	W	1	251
LAB	A	MF	8/11	242
		W	9/11	242
LAB	B	TT	3/6	242
		W	3/5	242

Arch. 133. Architectural Design. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Credit 3 hours. Prerequisite: Architecture 132, credit or registration in T.A.M. 150 or 171, and registration in Arch. 143.

LAB	A	MWF	3/6	242
LAB	B	MWF	9/12	242

Arch. 141. Materials and Methods of Construction I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Registration in Architecture 131.

LEC	R	TT	1	251

Arch. 142. Materials and Methods of Construction II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Credit 2 hours. Prerequisite: Architecture 141.

LEC	F	MF	1	251

Arch. 143. Materials and Methods of Construction III. Semi-fireproof construction, manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Architecture 142 and registration in Arch. 133.

LEC	P	TT	11	251

Arch. 214. History of Medieval Architecture. A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Credit 3 hours. Prerequisite: Architecture 113 or consent of instructor.

LEC	A	MWF	8	251

ART

Art 112. Introduction to Renaissance and Modern Art. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. Credit 3 hours.

LEC	C	MWF	10	251

Art 115. Art Appreciation. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. Credit 3 hours.

LEC	H	MWF	3	251

Art 118. Drawing II. Continuation of Art 117. Credit 2 hours. Prerequisite: Art 117.

LAB	A	TT	11/2	91

Art 120. Design. Continuation of Art 119. Credit 3 hours. Prerequisite: Art 119.

LAB	A	MWF	11/2	91

Art 181. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours.

LAB	A	MWF	8/10	83
LAB	B	MWF	10/12	83
LAB	C	MWF	12/3	83
LAB	D	MWF	3/5	83

Art 182. Freehand Drawing. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 181.

LAB	A	MWF	8/10	84
LAB	B	MF	10/1	84
LAB	C	TT	11/2	84
LAB	D	MWF	4/6	84
LAB	E	TT	8/11	84
LAB	F	TT	3/6	84

Art 183. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 182.

LAB	A	MF	8/11	91
LAB	B	TT	3/6	91

Art 184. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 183.

LAB	A	TT	8/11	91
LAB	B	MF	3/6	91
LAB	C	MF	2/5	91

Art 281. Freehand Drawing. Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184. Credit 2 hours.

LAB	A	TT	3/6	83

Biology 101. Fundamentals of Biology. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	R1	TT	1	213	YOKOYAMA
LAB	1	TT	3/5	48	
LAB	2	TT	8/10	46	YOKOYAMA
LAB	3	TT	10/12	46	YOKOYAMA
LAB	4	TT	8/10	48	NEWELL
LAB	5	MF	12/2	48	KRISHNA
LAB	6	MW	10/12	46	PRESLEY
LEC	M1	TT	9	210	PICKETT
LAB	7	MW	8/10	46	PRESLEY
LAB	8	MW	2/4	46	PICKETT
LAB	9	MW	12/2	46	PICKETT
LAB	10	TT	12/2	48	ROUFFA
LAB	11	MF	4/6	46	
LEC	T1	TT	3	213	PRESLEY
LAB	12	TT	4/6	46	LITTLE
LAB	13	WF	8/10	48	YOKOYAMA
LAB	14	TT	12/2	46	PRESLEY
LAB	15	M	2/4	48	RAWSON/KRISHNA
		F	2/4	46	
LAB	16	MF	4/6	48	RAWSON
LAB	17	W	12/2	48	
		F	12/2	46	

Biology 102. Fundamentals of Biology, Continued. Application of biological principles to the living world. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	Q1	TT	12	218	CHAPP
LAB	1	M	8/10	44	
		F	8/10	43	
LAB	2	WF	8/10	44	
LAB	3	MW	4/6	43	NEWELL
LAB	4	WF	4/6	44	CHAPP
LAB	5	M	10/12	44	SCUDDER
		F	10/12	43	
LAB	6	MW	10/12	43	NEWELL
LAB	7	M	4/6	44	KRISHNA
		F	4/6	43	
LEC	B1	WF	9	213	GLASSMAN
LAB	8	WF	12/2	44	GLASSMAN/CHAPP
LAB	9	MW	12/2	43	NEWELL
LAB	10	TT	8/10	44	
LAB	11	M	12/2	44	RAWSON
		F	12/2	43	
LAB	12	TT	3/5	43	CHAPP
LAB	13	TT	10/12	44	
LAB	14	WF	2/4	43	CHAPP

Biology 111. General Botany. The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor.

LEC	N1	TT	10	65	ROUFFA
LAB	1	WF	10/12	48	ROUFFA
LAB	2	WF	2/4	48	ROUFFA

Biology 115. Introductory Systematic Botany (Plant Taxonomy). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures and laboratory. Credit 4 hours. Prerequisite: Biology 102 or 111.

LEC	M1	TT	9	213	GLASSMAN
LAB	1	TT	10/12	48	GLASSMAN

Biology 121. Microbiology. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Credit 4 hours. Prerequisite: Biology 102 or consent of instructor.

LEC	C1	MW	10	213	MADISON
LAB	1	MW	8/10	43	MADISON

Biology 126. Advanced General Bacteriology. General technic, special apparatus and methods. Lectures and laboratory. Credit 4 hours. Prerequisite: Biology 121, credit or registration in Chemistry 105.

LEC	N1	TT	10	45	MADISON
LAB	1	TT	11/1	43	MADISON

Biology 131. General Zoology. A survey of the animal kingdom, the phylogenetic relationships of animals, and classification. Emphasis is placed upon economically important and parasitic forms. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	B1	WF	9	210	SHOMAY
LAB	1	WF	10/12	44	SHOMAY
LAB	2	TT	12/2	44	SHOMAY

Biology 132. Comparative Vertebrate Anatomy. Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	D1	MWF	11	210	SHANK
LAB	1	MWF	8/10	45	SPIRAKIS
LAB	2	TT	3/6	45	SHOMAY
LAB	3	TT	11/2	45	SPIRAKIS

Biology 136. Bird Study. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. Credit 2 hours.

LEC	M1	TU	9	45	SHANK
LAB	1	TH	8/10	45	SHANK

Biology 141. Vertebrate Physiology. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

LEC	P1	TT	11	213	PICKETT
LAB	1	TH	8/11	43	SPIRAKIS
QUIZ	1	TU	9	43	SPIRAKIS

Biology 162. Zoology for Pharmacy students. This course prepares the student in Pharmacy for the upper division studies in Physiology and in Pharmacology. Credit 4 hours. Prerequisite: Biology 161.

LEC	H1	WF	3	213	BOND
LAB	1	WF	10/12	45	BOND
LAB	2	MF	12/2	45	BOND
LAB	3	MW	4/6	45	BOND

Biology 333. Vertebrate Embryology. The development of the vertebrate body and its organs. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 132, junior standing.

LEC	F1	MWF	1	210	SANGSTER
LAB	1	MWF	2/4	44	SANGSTER
LAB	2	TT	3/6	44	SCUDDER

BUSINESS LAW

Business Law 100. Basic Principles of Business Law. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Credit 3 hours. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

B1	MWF	9	24	FOX
D1	MWF	11	38	FOX

CHEMISTRY

Chem. 101. General Chemistry. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Credit 5 hours. Prerequisite: 1 unit of entrance credit in physics, or $2\frac{1}{2}$ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	N	TT	10	204	ELBINGER
LAB	1	MWF	8/10	53	JOHNSON
QUIZ	1	TT	8	75	JOHNSON
LAB	2	MWF	11/1	53	JOHNSON
QUIZ	2	TT	11	75	JOHNSON
LAB	3	MWF	1/3	53	ELBINGER/DAFLER
QUIZ	3	TT	3	76	ELBINGER
LAB	4	TT	3/6	53	SCHRAGE/DAFLER
QUIZ	4	WF	12	75	CARBONARO

Chem. 102. General Chemistry. For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

LEC	C	WF	10	204	MUELLER
LAB	11	TU	8/10	53	MUELLER
QUIZ	11	WF	8	75	MUELLER
LAB	12	W	1/3	53	MUELLER
QUIZ	12	TT	10	76	MUELLER

LAB	13	F	12/2	53	MUELLER
QUIZ	13	TT	12	76	MUELLER
LAB	14	M	2/4	53	SEABRIGHT
QUIZ	14	WF	2	75	SEABRIGHT
LAB	15	M	3/5	53	CASTEN
QUIZ	15	TT	10	80	CASTEN
LAB	16	M	10/12	53	MILLER
QUIZ	16	WF	2	74	JOHNSON

Chem. 103. General Chemistry. For engineering students who have had no chemistry, or whose preparation is inadequate for Chemistry 102. Credit 4 hours. Prerequisite: 1 unit of entrance credit in physics, or $2\frac{1}{2}$ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

(Lecture and laboratory sections in this course are co-ordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	P	TT	11	204	KLAAS
LAB	21	WF	8/10	50	FARAG
QUIZ	21	WF	11	75	FARAG
LAB	22	MW	1/3	50	MANSFIELD
QUIZ	22	TT	1	76	KLAAS
LAB	23	WF	10/12	50	KLAAS
QUIZ	23	WF	12	74	KLAAS
LAB	24	TT	3/5	50	COWIN
QUIZ	24	WF	1	80	COWIN

LEC	G	WF	2	204	KLAAS
LAB	31	TT	10/12	50	GLASEL
QUIZ	31	TT	9	75	GLASEL
LAB	32	MW	3/5	50	FARAG/LOTHIAN
QUIZ	32	TT	3	75	FARAG
LAB	33	MW	11/1	50	HART
QUIZ	33	MW	10	80	HART
LAB	34	TT	12/2	50	HERZOG
QUIZ	34	WF	1	74	HERZOG

Chem. 104. Chemistry of the Metallic Elements. Limited to students in engineering curricula. Credit 4 hours. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105, 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	C	WF	10	210	HUITEMA
LAB	36	WF	8/10	50	SACKHEIM
QUIZ	36	TT	8	74	SACKHEIM
LAB	37	MW	11/1	50	SACKHEIM
QUIZ	37	TT	12	74	SACKHEIM
LAB	38	MW	2/4	50	HERZOG
QUIZ	38	WF	9	74	HERZOG
LAB	39	TT	9/11	50	BACHRACH
QUIZ	39	TT	8	76	BACHRACH
LAB	40	TT	10/12	50	PERRY
QUIZ	40	MW	11	74	PERRY

LEC	P	TT	11	210	SCHRAGE
LAB	44	TT	9/11	50	SACKHEIM
QUIZ	44	MF	10	76	SACKHEIM
LAB	46	MF	10/12	50	HERZOG
QUIZ	46	TT	9	80	HERZOG
LAB	47	TT	3/5	50	CASTEN
QUIZ	47	WF	2	76	CASTEN
LAB	48	WF	12/2	50	PERRY
QUIZ	48	WF	9	75	PERRY
LAB	49	MF	2/4	50	PERRY
QUIZ	49	TT	4	74	PERRY

Chem. 105. Inorganic Chemistry and Qualitative Analysis. For students who are not eligible for Chemistry 104 or 106. Credit 5 hours. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	E	WF	12	210	HUNT
LAB	51	MWF	8/10	53	SEABRT./GLASEL
QUIZ	51	TT	9	76	SEABRIGHT
LAB	52	MWF	10/12	53	CASTEN
QUIZ	52	TT	12	80	CASTEN
LAB	53	MWF	3/5	53	CARBONARO
QUIZ	53	TT	4	75	CARBONARO
LAB	54	TT	3/6	53	SAVOY
QUIZ	54	WF	3	75	SAVOY
LAB	55	MWF	9/11	53	CARBONARO
QUIZ	55	TT	12	75	CARBONARO

LEC	Q	TT	12	210	HUNT
LAB	56	MWF	1/3	53	LOTHIAN
QUIZ	56	WF	12	80	LOTHIAN
LAB	57	MWF	4/6	53	DAFLER/SAVOY
QUIZ	57	MW	2	80	DAFLER
LAB	58	MWF	12/2	53	FARAG
QUIZ	58	TT	11	80	FARAG
LAB	59	TT	8/11	53	HEDBERG
QUIZ	59	WF	9	76	HEDBERG

Chem. 106. Inorganic Chemistry. Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit 5 hours. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104, 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101. 102. or 103.

LEC	H	WF	3	204	RIETZ
LAB	61	MWF	11/1	50	DAFLER
QUIZ	61	TT	11	76	DAFLER
LAB	62	TT	3/6	50	RIETZ
QUIZ	62	WF	4	74	RIETZ

Chem. 108. General Chemistry and Qualitative Analysis. For students in curricula in chemistry or chemical engineering. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit is not granted to students who have received credit in Chemistry 104, 105, 106, or 109. Prerequisite: Chemistry 107.

LEC	N	TT	10	210	WELDON
LAB	66	MWF	8/10	53	WELDON
QUIZ	66	WF	10	75	WELDON
LAB	67	MWF	1/3	53	HEDBERG/HUNT
QUIZ	67	TT	3	80	HEDBERG

Chem. 109. General and Inorganic Chemistry. A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of general inorganic chemistry are advised to take a two-semester sequence instead of Chemistry 109. Not open to students who have college credit in chemistry. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the highest quarter of the class.

LEC	F	MWF	1	204	HUITEMA
LAB	71	M	9/12	50	HUITEMA
QUIZ	71	TT	1	80	HUITEMA

Chem. 110. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major in chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Credit 5 hours. Prerequisite: Chemistry 106 or equivalent.

LEC	T	TT	3	210	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12	53	MANSFIELD
QUIZ	76	MW	3	76	MANSFIELD

Chem. 122. Elementary Quantitative Analysis. Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	Q	TT	12	204	BABLER
LAB	81	MWF	8/11	54	LOTHIAN
QUIZ	81	TH	9	74	LOTHIAN
LAB	82	MWF	3/6	54	POTEMPA
QUIZ	82	TH	3	74	POTEMPA
LAB	83	MWF	9/12	54	GOTTLI/SEABRIT
QUIZ	83	TU	10	75	GOTTLIEB

Chem. 123. Quantitative Analysis for Engineers. A course in quantitative analysis designed for the needs of engineers, especially ceramic and metallurgical. Credit 5 hours. Prerequisite: Chemistry 104, 105 or 109.

LEC	Q	TT	12	65	GOTTLIEB
LAB	85	MWF	1/4	54	GOTTLIEB
QUIZ	85	TU	3	74	GOTTLIEB

Chem. 124. Quantitative Analysis. For all students in the chemistry curriculum and chemical engineering. Credit 5 hours. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	T	TT	3	204	BABLER
LAB	86	MWF	12/3	54	BABLER/HART
QUIZ	86	TU	1	75	BABLER

Chem. 132. Elementary Organic Chemistry. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum. Credit 3 hours. Prerequisite: Chemistry 101, 102, 109 or equivalent.

LEC	E	WF	12	65	WELDON
LAB	90	TH	10/1	52	SEABRIGHT
QUIZ	90	TU	10	74	SEABRIGHT

Chem. 133. Elementary Organic Chemistry. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	E	WF	12	204	CRUM
EXAM		M	12	204	
LAB	91	TT	9/12	52	CRUM
QUIZ	91	M	9	75	CRUM
LAB	92	MW	2/5	52	CRUM
QUIZ	92	F	2	80	CRUM
LAB	93	WF	9/12	52	ELBINGER
QUIZ	93	M	10	75	ELBINGER

Chem. 234. Organic Chemistry. For students whose major is chemistry, or for those registered in the curriculum in chemistry or chemical engineering. Credit 5 hours. Prerequisite: Chemistry 124.

LEC	R	TT	1	65	BACHRACH
LAB	96	MW	9/12	52	BACHRACH
QUIZ	96	F	10	80	BACHRACH

Chem. 247. Elementary Physical Chemistry. For premedical students and others not in chemistry and engineering curricula. Lectures and laboratory. Credit 4 hours. Prerequisite: Chemistry 122 and 133; Physics 102, or equivalent.

LEC	D	MWF	11	65	SCHRAGE
LAB	98	TU	3/6	50A	SCHRAGE

CIVIL ENGINEERING

C. E. 106. Surveying. Topographic surveying; field astronomy; route surveying; stream gaging; introduction to photogrammetry. Credit 3 hours. Prerequisite: Civil Engineering 105; credit or registration in General Engineering 111.

LEC	M	TT	9	63
LAB	A	M	9/12	63
LAB	B	F	9/12	63

C. E. 160. Engineering Construction and Materials. Materials, types of construction, and details of buildings. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	G	MWF	2	63

C. E. 235. Plain Concrete. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and ad-mixtures; proportioning, field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proporting projects. Credit 2 hours. Prerequisite: Sophomore standing in engineering or architecture.

LAB	A	MW	10/12	61
LAB	B	TT	10/12	61

ECONOMICS

Econ. 100. Introduction to Business. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. Credit 3 hours.

C1	MWF	10	20	KNUDSON
D1	MWF	11	18	CRABB
F1	MWF	1	17	FERRERA
H1	MWF	3	20	GELDARD
M1	MTT	9	18	GELDARD
P1	MTT	11	20	KNUDSON
R1	MTT	1	20	CRABB

Econ. 102. Principles of Economics I. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Credit 3 hours. Prerequisite: One year of college work.

B1	MWF	9	17	FERRERA
D1	MWF	11	19	FERRERA
G1	MWF	2	23	GILLETT
G2	MWF	2	17	FERRERA
N1	MTT	10	19	SHAW

Econ. 103. Principles of Economics II. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Credit 3 hours. Prerequisite: Economics 102.

C1	MWF	10	16	MILLER
E1	MWF	12	19	SHAW
G1	MWF	2	38	GRAMPP
H1	MWF	3	38	GRAMPP
R1	MTT	1	19	SHAW

Econ. 108. Elements of Economics. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Credit 3 hours. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	24	DUNNE
F1	MWF	1	24	DUNNE
G1	MWF	2	19	MILLER
H1	MWF	3	17	SELTZER
J1	MWF	4	17	SELTZER
P1	MTT	11	16	MILLER
Q1	MTT	12	16	MILLER

Econ. 136. American Economic History. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Credit 3 hours. Open to freshmen and sophomores only.

C1	MWF	10	24	GRAMPP
D1	MWF	11	17	SELTZER
E1	MWF	12	24	GRAMPP
E2	MWF	12	17	SELTZER
G1	MWF	2	18	CRABB
H1	MWF	3	16	SHEARD
J1	MWF	4	20	GELDARD
M1	MTT	9	16	SHEARD
N1	MTT	10	18	GELDARD
U1	MTT	4	38	CRABB

Econ. 138. European Economic History. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Credit 3 hours. Open to freshmen and sophomores only.

B1	MWF	9	19	SHAW

Econ. 170. Elements of Statistics. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Credit 3 hours. Prerequisite: Economics 102 or 108; sophomore standing.

QUIZ	B1	MW	9	33	LARSON
LAB	1	F	9/11	33	LARSON
QUIZ	D1	MW	11	33	LARSON
LAB	2	F	11/1	33	LARSON
QUIZ	G1	MW	2	33	DERRICK
LAB	3	F	2/4	33	DERRICK
QUIZ	Q1	MT	12	33	DERRICK
LAB	4	TH	11/1	33	DERRICK
QUIZ	T1	MT	3	33	DERRICK
LAB	5	TH	2/4	33	DERRICK

EDUCATION

Ed. 101. Nature of the Teaching Profession. An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. Credit 2 hours.

M1	TT	9	28	RICKS
P1	TT	11	28	RICKS
R1	TT	1	28	RICKS

Ed. 109. Educational Psychology. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Credit 3 hours. Prerequisite: Psychology 100.

N1	TTF	10	28	RICKS

Ed. 201. Foundations of American Education. A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Credit 2 hours. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

R1	TT	1	22	LITTLE
T1	TT	3	28	LITTLE

ELECTRICAL ENGINEERING

E. E. 126. Electric Circuits and Fields. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Credit 4 hours. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	D1	MWF	11	134
LAB	D	TU	9/12	120
QUIZ	H1	MWF	3	110
LAB	H	TH	3/6	120

ENGLISH

English 101. Introduction to Poetry. Understanding of poetry through the reading and discussion of representative poems. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	215	I MILLER
D1	MWF	11	214	F JOHNSON
G1	MWF	2	225	ATWOOD
N1	MTT	10	212	JACKMAN
T1	MTT	3	215	S MILLER

English 102. Introduction to Drama. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	214	MACKIN
D1	M	11	215	CASSELL
	WF	11	212	
N1	M	10	214	LOVE
	TT	10	215	
R1	M	1	214	CRAWLEY
	TT	1	222	
U1	TTF	4	215	SCHILLER

English 103. Introduction to Fiction. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's "Pride and Prejudice," Balzac's "Pere Goriot," Arnold Bennett's "Old Wives' Tale," Dostoevski's "Crime and Punishment," Robert Penn Warren's "All the King's Men" and the anthology "Reading Modern Short Stories." Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	229	FRIEND
C1	MWF	10	229	KERWICK
G1	MWF	2	212	HIPPLE
H1	F	3	226	MCNAMARA
L1	MTT	8	216	LEONHARD
Q1	MTT	12	212	GALLAGHER
T1	MTT	3	229	GRIEST

English 113. American Literature. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

A1	MWF	8	212	WRIGHT
G1	MWF	2	226	WILLETT
Q1	TT	12	215	JORDAN
	F	12	212	
R1	MTT	1	212	KOGAN

English 114. American Literature. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	212	WRIGHT
G1	MWF	2	215	KARANIKAS
M1	M	9	222	NICHOLAS
	TT	9	219	
P1	MTT	11	212	STRONKS

English 121. Chief English Writers Before 1800. "Canterbury Tales," "Utopia," two plays by Shakespeare, "Paradise Lost," "Gulliver's Travels," "Tom Jones," "Rasselas." This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

F1	MWF	1	227	COX

English 122. Chief English Writers of the Nineteenth Century. Wordsworth, Byron, Carlyle's "Past and Present," Arnold's prose and poetry, FitzGerald's "The Rubaiyat of Omar Khayyam," readings from T. H. Huxley, Browning's poems, and one novel. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	M	9	214	J JOHNSON
	WF	9	217	

English 123. Chief Modern English Writers. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	215	WEISS

English 131. Introduction to Shakespeare. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	215	VEST

French 101. Elementary Course. Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	224	LUTTON
B1	TWTF	9	226	SKOGEN
E1	TWTF	12	224	MEYER
H1	TWTF	3	222	LALLAS
J1	TWTF	4	226	LALLAS

French 102. Elementary Course. Continuation of French 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	224	LUTTON
C1	TWTF	10	222	LEIN
D1	TWTF	11	224	MEYER
E1	TWTF	12	226	SKOGEN
H1	TWTF	3	224	MEYER

French 103. Modern French. Rapid reading of modern authors, syntax, and composition; some conversational practice. Credit 4 hours. Prerequisite: French 102 or two years of high school French.

C1	TWTF	10	226	SKOGEN
F1	TWTF	1	226	SKOGEN

French 104. Modern French. Continuation of French 103. Credit 4 hours. Prerequisite: French 103 or three years of high school French.

B1	TWTF	9	222	LEIN
D1	TWTF	11	222	LEIN
F1	TWTF	1	224	MEYER

French 202. Introduction to French Literature. Continuation of French 201. Credit 3 hours. Prerequisite: French 104 or four years of high school French.

F1	MWF	1	222	LEIN

G. E. 101. Elements of Drawing. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Credit 3 hours. Prerequisite: Plane geometry.

A1	MWF	8/10	135
A2	MWF	8/10	136
B1	MWF	10/12	135
B2	MWF	10/12	136
C1	MWF	12/2	135
C2	MWF	12/2	136
D1	MWF	2/4	135
D2	MWF	2/4	136
F1	TT	8/11	135
F3	TT	8/11	137
G1	TT	11/2	135

G. E. 102. Engineering Geometry. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Credit 3 hours. Prerequisite: General Engineering 101.

A3	MWF	8/10	137
A4	MWF	8/10	141
A5	MWF	8/10	143
A6	MWF	8/10	145
B3	MWF	10/12	137
B4	MWF	10/12	141
B5	MWF	10/12	143
B6	MWF	10/12	145
C3	MWF	12/2	137
C4	MWF	12/2	141
C5	MWF	12/2	143

D3	MWF	2/4	137
D4	MWF	2/4	141
D5	MWF	2/4	143
F4	TT	8/11	141
F5	TT	8/11	143
G3	TT	11/2	137
G4	TT	11/2	141

G. E. 107. **Architectural Projections.** Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Credit 2 hours. Prerequisite: Plane geometry.

G6	TT	11/2	145
C6	MWF	12/2	145
F6	TT	8/11	145

G. E. 108. **Architectural Projections.** Shades and shadows; oblique, isometric, and perspective drawings; developments. Credit 2 hours. Prerequisite: General Engineering 107.

A7	MWF	8/10	146
C7	MWF	12/2	146
D7	MWF	2/4	146
F7	TT	8/11	146

G. E. 111. **Advanced Drafting for Civil Engineers.** Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

G7	TT	11/2	146

G. E. 112. General Engineering Technology. For mechanical engineers. Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

F2	TT	8/10	136
G2	TT	12/2	136

G. E. 210. Industrial Production Illustration. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. Credit 3 hours. Prerequisite: General Engineering 102, or 107 and 108.

D6	MWF	2/4	145

G. E. 212. Graphical Calculations. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Credit 1 hour. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

N2	TT	10	136
P2	TT	11	136

GEOGRAPHY

Geog. 101. Elements of Geography. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit.

LEC	N1	TT	10	218	CUTSHALL
	A1	MWF	8	13	RHEUMER
	B1	MWF	9	13	FINNEY
	D1	MWF	11	13	FINNEY
	Q1	TT	12	13	CUTSHALL
		F	12	14	CUTSHALL

Geog. 104. World Regional Geography. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

N1	TTF	10	14	COLBY
R1	MTT	1	14	COLBY

Geog. 105. Introductory Economic Geography. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

E1	MWF	12	13	FINNEY

Geog. 111. Introductory Meteorology. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Credit 3 hours. Prerequisite: Geography 101 or consent of instructor.

C1	MWF	10	13	RHEUMER
G1	MWF	2	13	RHEUMER

Geog. 114. Conservation of Natural Resources. Elements of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis given to the general principles of conservation as they apply to the United States. Credit 3 hours. Prerequisite: Sophomore standing.

D1	MWF	11	14	RHEUMER

GEOLOGY

Geol. 101. Physical Geology. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	204	
LAB	1	TU	8/10	42	KURS
QUIZ	1	TH	8	42	KURS
LAB	2	TH	10/12	42	DEMAR
QUIZ	2	TU	11	42	DEMAR
LAB	3	W	12/2	42	
QUIZ	3	F	12	42	
LAB	4	F	1/3	42	
QUIZ	4	W	2	42	

Geol. 102. Historical Geology. Evolution of the earth and its life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 142.

LEC	H	WF	3	210	DEMAR
LAB	11	W	10/12	42	DEMAR
QUIZ	11	F	10	42	DEMAR
LAB	12	TU	3/5	42	DEMAR
QUIZ	12	TH	3	42	DEMAR

Geol. 110. Field Work. Field observation in St. Francois Mountains and adjacent parts of Missouri and Illinois. (During spring vacation.) Two three-hour class meetings to be arranged. Credit is given only on completion of a satisfactory written report. Credit 2 hours. Prerequisite: Geology 101, 150, or Physical Science 102.

LAB	18	Field trip Thurs., Mar. 26 thru. Tues., Mar. 31 (6 days) Report due by Fri., May 1.	STAFF

Geol. 132. Mineralogy. A systematic study of minerals and rocks. The geologic relationships of minerals and rocks are emphasized. The common silicate minerals and the important varieties of rocks are studied in the laboratory. Lecture and laboratory. Credit 4 hours. Prerequisite: Geology 131.

LAB	DIS	MWF	8/10	42	KURS

Geol. 150. Geology for Engineers. Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	D	MW	11	204
LAB	21	M	1/3	42
LAB	22	F	3/5	42

GERMAN

German 101. Elementary Course. Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

H1	TWTF	3	220	KAUF
B1	TWTF	9	220	WILLNER
C1	TWTF	10	220	WILLNER
D1	TWTF	11	220	ROSMAN
E1	TWTF	12	220	ROSMAN
F1	TWTF	1	220	BRAUNFELD
H1	TWTF	3	220	KAUF
J1	TWTF	4	220	BRAUNFELD

German 102. Elementary Course. Continuation of German 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

A1	TWTF	8	220	HARTOCH
B1	TWTF	9	221	TEICHMANN
D1	TWTF	11	221	TEICHMANN
D2	TWTF	11	215	KAUF
E1	TWTF	12	221	BRAUNFELD
F1	TWTF	1	221	WILLNER
F2	TWTF	1	215	KAUF
H1	TWTF	3	221	ROSMAN

German 103. Intermediate Course. Modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 102, two years of high school German, or equivalent.

C1	TWTF	10	219	TEICHMANN
E1	TWTF	12	219	KAUF
F1	TWTF	1	219	ROSMAN

German 104. Intermediate Course. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 103, three years of high school German, or equivalent.

B1	TWTF	9	223	HARTOCH
D1	TWTF	11	223	WILLNER
F1	TWTF	1	223	TEICHMANN
H1	TWTF	3	223	BRAUNFELD

German 210. Masterpieces of German Literature. Introduction to German literature, its subjects, forms, and ideals. Credit 3 hours. Prerequisite: Two years of college German, or equivalent.

D1	MWF	11	219	VARDAMAN

Hist. 112. History of Western Civilization from 1815 to the Present. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

(Lecture and quiz sections in this course are coordinate. Quiz sections must be chosen from one of the groups listed directly beneath this particular section.)

LEC	P1	TT	11	218	NICHOLSON
	F1	WF	1	37	GOODMAN
	G1	WF	2	37	GOODMAN
	R1	TT	1	82	NICHOLSON
	R2	TT	1	97	GOODMAN
	T1	TT	3	97	NICHOLSON
LEC	F1	MW	1	218	UNFER
	H1	MW	3	37	UNFER
	L1	TT	8	19	UNFER
	M1	TT	9	19	UNFER
	P1	TT	11	19	UNFER
	Q1	TT	12	19	UNFER

Hist. 132. History of England from 1714 to the Present. A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1714 to the present. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	213	GOODMAN/JONES
	M1	TTF	9	37	GOODMAN
	N1	TTF	10	37	GOODMAN
	P1	MTT	11	37	JONES
	R1	MTT	1	37	JONES

Hist. 152. History of the United States from 1865 to the Present. A century of national life and organization. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	C1	M	10	218	RIDDLE
	B1	MW	9	37	JONES
	M1	TT	9	82	RIDDLE
	N1	TT	10	82	BILL
	N2	TT	10	97	JONES
	P1	TT	11	97	BILL

Hist. 182. The Ancient World. Rome. Credit 3 hours. Prerequisite: Sophomore standing.

M1	TTF	9	97	NICHOLSON

HUMANITIES

Humanities 102. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. Credit 4 hours. Prerequisite: Humanities 101.

B1	TWTF	9	214	BLUM
C1	TWTF	10	214	JORDAN
F1	TWTF	1	214	BLUM
H1	TWTF	3	214	RUNYAN

Humanities 152. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. This course, plus Humanities 151, satisfies the general education requirement in the humanities. Credit 4 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	TWTF	10	223	VARDAMAN
E1	TWTF	12	223	VARDAMAN
H1	TWTF	3	227	SCHILLER

HYGIENE

Hygiene 104. Personal and Community Hygiene. This course covers basic principles of hygiene. Especially recommended for those going into teaching, occupational therapy, social work, etc. Credit: 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

A	WF	8	229	STAFF
F	WF	1	229	STAFF
G	WF	2	229	STAFF
L	TT	8	229	STAFF
M	TT	9	229	STAFF
N	TT	10	229	STAFF
P	TT	11	229	STAFF
Q	TT	12	229	STAFF
R	TT	1	229	STAFF

Hygiene 110. Public Health. Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P	TT	11	20	SPIES

MANAGEMENT

Management 101. Industrial Organization and Management. Organization plans, administrative policies, and management problems with special attention to manufacturing units. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	38	GILLETT
D1	MWF	11	23	GILLETT
F1	MWF	1	23	GILLETT
G1	MWF	2	16	SHEARD
R1	MTT	1	16	SHEARD

MARKETING

Marketing 101. Principles of Marketing. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

E1	MWF	12	20	KNUDSON
G1	MWF	2	20	LARSON
T1	MTT	3	22	KNUDSON

Math. 101. Basic Mathematics. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. Credit 3 hours.

D1	MWF	11	106	ZYGMUND
G1	MWF	2	96	ZIOMEK

Math. 103. Introduction to College Algebra. Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Credit 3 hours. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MTWTF	8	94	SJOBLOM
A2	MTWTF	8	96	REES
B1	MTWTF	9	96	LUMLEY
B2	MTWTF	9	100	SJOBLOM
B3	MWF	9	94	FEINSTEIN
C1	MTWTF	10	96	FEINSTEIN
C2	MTWTF	10	94	VEDRAL
D1	MTWTF	11	100	BERGLUND
D2	MTWTF	11	94	OLSEN
E1	MTWTF	12	94	LINN
E2	MWF	12	96	ONDRAK
G1	MWF	2	104	GORDON
H1	MTWTF	3	106	ALBERTI
H2	MTWTF	3	100	NOLAN
H3	MWF	3	96	WILEY
J1	MTWTF	4	96	HENDERLEITER
J2	MTWTF	4	100	ALBERTI

Math. 108. Elementary Plane Geometry for Veterans. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. No credit.

F1	MWF	1	105	BERGLUND

Math. 110. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Credit 4 hours. Prerequisite: Mathematics 109.

D1	MTWT	11	101	LINN

Math. 112. College Algebra. Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

(*) Sections for Commerce students only.

A1	MWF	8	103	LUMLEY
* A2	MWF	8	100	VEDRAL
A3	MWF	8	101	ZYGMUND
* B1	MWF	9	101	MERTES
B2	MWF	9	102	BALLARD
C1	MWF	10	102	FRANK
C2	MWF	10	103	SCHOLOMITI
* D1	MWF	11	80	SEARS
D2	MWF	11	76	MERTES
D3	MWF	11	103	FRANK
D4	MWF	11	111	LUMLEY
D5	MWF	11	102	MURPHY
F1	MWF	1	103	GORDON
F2	MWF	1	100	ZIOMEK
F3	MWF	1	101	LARIVIERE
F4	MWF	1	102	MERTES
G1	MWF	2	103	OLSEN
G2	MWF	2	100	HILL
G3	MWF	2	102	HENDERLEITER
* G4	MWF	2	101	PENNISI
* H1	MWF	3	103	HENDERLEITER
H2	MWF	3	102	LARIVIERE
H3	MWF	3	104	ZIOMEK

Math. 114. Plane Trigonometry. Identities, equations, addition formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	100	BALLARD
L2	TT	8	101	ZYGMUND
M1	TT	9	103	CURTIS
M2	TT	9	101	MERTES
M3	TT	9	102	OLSEN
N1	TT	10	101	BALLARD
N2	TT	10	103	MERTES
N3	TT	10	102	LUMLEY
P1	TT	11	102	VEDRAL
P2	TT	11	96	SEARS
Q1	TT	12	102	DINKINES
Q2	TT	12	96	ZIOMEK
Q3	TT	12	101	LARIVIERE
Q4	TT	12	100	WILEY
T1	TT	3	104	ZIOMEK
T2	TT	3	102	LARIVIERE
T3	TT	3	103	HENDERLEITER
U1	TT	4	104	GORDON

Math. 123. Analytic Geometry. Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 112 and 114.

A1	MTWTF	8	104	SCHOLOMITI
B1	MTWTF	9	104	REES
B2	MTWTF	9	105	ZYGMUND
C1	MTWTF	10	104	ONDRAK
C2	MTWTF	10	105	SEARS
C3	MTWTF	10	100	LINN
D1	MTWTF	11	105	WILEY

E1	MTWTF	12	104	MURPHY
E2	MTWTF	12	105	NOLAN
H1	MTWTF	3	105	HILL

Math. 133. Calculus. First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Credit 3 hours. Prerequisite: Mathematics 123.

A1	MWF	8	106	BALLARD
B1	MWF	9	106	VEDRAL
C1	MWF	10	111	SJOBLOM
D1	MWF	11	96	NOLAN
E1	MWF	12	100	REES
F1	MWF	1	111	SEARS
F2	MWF	1	104	OLSEN
F3	MWF	1	96	WILEY
G1	MWF	2	105	LARIVIERE
G2	MWF	2	111	ALBERTI
H1	MWF	3	101	PENNISI

Math. 143. Calculus. Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expansion of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Credit 5 hours. Prerequisite: Mathematics 133.

A1	MTWTF	8	111	ONDRAK
A2	MTWTF	8	105	CURTIS
B1	MTWTF	9	111	BERGLUND
D1	MTWTF	11	104	DINKINES
E1	MTWTF	12	111	SCHOLOMITI
E2	MTWTF	12	106	HILL
H1	MTWTF	3	111	GORDON

Math. 161. Statistics. Credit 3 hours. Prerequisite: Mathematics 112; sophomore standing.

C1	MWF	10	101	DINKINES

Math. 343. Advanced Calculus: Credit 3 hours. II. Prerequisite: One year of calculus.

B1	MWF	9	103	MORGENTHALER
F1	MWF	1	106	PENNISI

Math. 345. Differential Equations and Orthogonal Functions. Credit 3 hours. Prerequisite: One year of calculus.

C1	MWF	10	102	FRANK
E1	MWF	12	106	CURTIS
E2	MWF	12	103	FEINSTEIN
G1	MWF	2	106	MURPHY

MECHANICAL ENGINEERING

M. E. 182. Manufacturing Processes. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Credit 3 hours. Prerequisite: General Engineering 101, sophomore standing.

	B1	MWF	9	65

M. E. 183. Materials Casting. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Credit 3 hours. Prerequisite: General Engineering 101; sophomore standing.

LEC	C	MF	10	65
LEC	F	MF	1	65
LAB	A	TU	8/11	71
LAB	B	W	11/2	71
LAB	C	W	2/5	71

M. E. 184. Metal Processing. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Credit 3 hours. Prerequisite: General Engineering 101; credit or registration in Integral Calculus and Physics 108.

LEC	M	TT	9	65
LEC	P	TT	11	65
LAB	A	M	11/2	64
LAB	B	W	11/2	64
LAB	C	F	2/5	64

M. E. 209. Thermodynamics and Heat Transfer. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Credit 3 hours. Prerequisite: Physics 108; Mathematics 142 or 143.

	G1	MW	2	113
		F	2/4	113

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. Freshman Basic Drill and Theory. Basic military instruction to include: American military history, and leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 101 or equivalent.

THEORY	1	MW	9	228	CLAMPITT
THEORY	2	TT	9	228	CLAMPITT
THEORY	3	MW	10	228	CLAMPITT
THEORY	4	TT	10	228	CLAMPITT
THEORY	5	MW	11	228	CLAMPITT
THEORY	6	TT	11	228	CLAMPITT
DRILL	1	TU	8	AUD	JONES
DRILL	2	W	8	AUD	JONES
DRILL	3	TH	8	AUD	JONES

Mil. Sci. 104. Sophomore Basic Drill and Theory. Basic military instruction to include: Crew-served weapons and gunnery; basic tactics; and leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 103 or equivalent.

THEORY	1	TT	9	230	CHAMBERS
THEORY	2	MW	11	230	CHAMBERS
THEORY	3	TT	10	230	CHAMBERS
DRILL	1	TU	8	AUD	CRUMPACKER
DRILL	2	W	8	AUD	CRUMPACKER
DRILL	3	TH	8	AUD	CRUMPACKER

MUSIC

Music 100. Rudiments of Theory. Notation, scales, intervals, chords, terminology. Credit 2 hours.

D1	MWF	11	* 354	FISSINGER

Music 131. Introduction to the Art of Music, II. Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only. Credit 3 hours.

C1	MWF	10	* 354	FISSINGER

Music 150. Music Ensemble. Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Credit ½ hour.

**	A	TT	2	* 354	CHARKOVSKY
	B	TT	12	* 354	CHARKOVSKY
***	C	TT	11	* 354	FISSINGER
		F	3/5	* 354	

* Room 354 is at the west end of the south building of Navy Pier.

** Band rehearsals often continue for a part or all of the 3 o'clock hour for students able to arrange their schedules to permit this; attendance during the 3 o'clock hour is desired, but not required.

*** Students unable to arrange Chorus meetings all four hours each week may still participate with consent of the director. To earn credit, attendance at rehearsals at least 2 hours weekly is required.

Pharmacy 102. Pharmaceutical Processes. A study of pharmaceutical processes, manipulations, definitions and nomenclature. Laboratory work consists of experiments to illustrate the important pharmaceutical technics. Credit 3 hours. Prerequisite: Pharmacy 101.

R1	TU	1	210	STAFF
	TH	2	SB (EDMP)	
1	TH	3/5	200 (EDMP)	

NOTE: Room 210 is at Navy Pier; rooms SB and 200 are at the professional campus.

PHILOSOPHY

Phil. 101. Introduction to Philosophy. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form an approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

C1	MWF	10	97	PAGE
E1	MWF	12	97	PAGE
F1	MWF	1	97	MORRIS

Phil. 102. Logic. Reasoning, detection of fallacies, evidence. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	82	PAGE
D1	MWF	11	97	MORRIS
G1	MWF	2	82	MORRIS
Q1	TT	12	22	MORRIS
	TU	11	22	MORRIS

Phil. 105. Moral Ideas and Practice. Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Q1	TT	12	24	PAGE
R1	TT	1	24	PAGE

* Classes will meet for $1\frac{1}{2}$ hours.

** Classes will meet for $1\frac{1}{2}$ hours; students will be released early to participate in extra-curricular activities.

*** Special conditioning sections; adaptive only.

P. E. M. 101, 102, 103, 104. Prescribed Exercises. Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively. Credit 1 hour.

	C	MWF	10	GYM	SPRINGER
	D	MWF	11	GYM	KRISTUFEK
	E	MWF	12	GYM	MANN
	F	MWF	1	GYM	FORDHAM

P. E. M. 106. Developmental Activities. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. Credit 1 hour.

***	A	MWF	8	GYM	MILLER
	B	MWF	9	GYM	NEMOTO
	C	MWF	10	GYM	GEDVILAS
	D	MWF	11	GYM	MONTCALM
	E	MWF	12	GYM	RADER
	F	MWF	1	GYM	ANDERSON
	G	MWF	2	GYM	FORDHAM
***	H	MWF	3	GYM	VERSEN

P. E. M. 107. Beginning Swimming. For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period

*	LM	TT	8		CANINO

P. E. M. 109. Advanced Swimming. For swimmers (ability to swim at least 100 yards). Students must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

*	MN	TT	9		SPRINGER

P. E. M. 112. Individual Tumbling Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	B	MWF	9	GYM	MILLER
	D	MWF	11	GYM	SPRINGER
	E	MWF	12	GYM	CANINO
	G	MWF	2	GYM	CANINO
*	PQ	TT	11	GYM	MONTCALM
*	QR	TT	12	GYM	ANDERSON

P. E. M. 113. Double Tumbling Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	F	MWF	1	GYM	SPRINGER

P. E. M. 114. Apparatus Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	C	MWF	10	GYM	MONTCALM
	D	MWF	11	GYM	CANINO
	E	MWF	12	GYM	MONTCALM
	F	MWF	1	GYM	MONTCALM
	H	MWF	3	GYM	CANINO
*	NP	TT	10	GYM	ANDERSON
**	RS	TT	1	GYM	MONTCALM

P. E. M. 117. Boxing. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	C	MWF	10	GYM	MILLER
	D	MWF	11	GYM	BERRAFATO
	E	MWF	12	GYM	MILLER
	G	MWF	2	GYM	ANDERSON
	H	MWF	3	GYM	ANDERSON
*	PQ	TT	11	GYM	KRISTUFEK
*	QR	TT	12	GYM	STRNAD

P. E. M. 118. Wrestling. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	B	MWF	9	GYM	KRISTUFEK
	C	MWF	10	GYM	KRISTUFEK
	D	MWF	11	GYM	MANN
	E	MWF	12	GYM	ANDERSON
	F	MWF	1	GYM	STRNAD
	G	MWF	2	GYM	MANN
*	NP	TT	10	GYM	MANN
*	QR	TT	12	GYM	MANN
**	RS	TT	1	GYM	STRNAD

P. E. M. 120. Personal Defense Activities. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	A	MWF	8	GYM	NEMOTO
	H	MWF	3	GYM	STRNAD
*	MN	TT	9	GYM	NEMOTO

P. E. M. 123. Weight Lifting. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	A	MWF	8	GYM	SPRINGER
	B	MWF	9	GYM	GEDVILAS
	C	MWF	10	GYM	NEMOTO
	D	MWF	11	GYM	RADER
	E	MWF	12	GYM	STRNAD
	F	MWF	1	GYM	NEMOTO
	G	MWF	2	GYM	KRISTUFEK
*	LM	TT	8	GYM	NEMOTO
*	NP	TT	10	GYM	CANINO
*	PQ	TT	11	GYM	BERRAFATO
*	QR	TT	12	GYM	VERSEN
**	RS	TT	1	GYM	ANDERSON

P. E. M. 129. Volleyball. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

	F	MWF	1	GYM	KRISTUFEK
	G	MWF	2	GYM	VERSEN
*	MN	TT	9	GYM	MILLER
*	NP	TT	10	GYM	MONTCALM
*	PQ	TT	11	GYM	SPRINGER
*	QR	TT	12	GYM	BERRAFATO
**	RS	TT	1	GYM	FORDHAM

P. E. M. 130. Basketball. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	RADER
D	MWF	11	GYM	GEDVILAS
E	MWF	12	GYM	VERSEN

P. E. M. 132. Archery. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

*	NP	TT	10	GYM	RADER

P. E. M. 136. Badminton. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

*	NP	TT	10	GYM	KRISTUFEK
*	PQ	TT	11	GYM	NEMOTO
*	QR	TT	12	GYM	CANINO
**	RS	TT	1	GYM	MANN

P. E. M. 139. Backyard Sports. Skills, knowledge, and conditions. Credit 1 hour.

	H	MWF	3	GYM	MANN
**	RS	TT	1	GYM	VERSEN

P. E. M. 140. Boating and Fishing. Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

*	PQ	TT	11	GYM	RADER
*	QR	TT	12	GYM	SPRINGER

P. E. M. 142. Ballroom Dance. Credit 1 hour.

G	MWF	2		AUD	THOMAS

P. E. M. 150. Professional Orientation. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. Credit 2 hours.

D	WF	11		21	FORDHAM

P. E. M. 151. Beginning Basketball. Introductory skills, rules and stategy. For physical education majors. Credit 2 hours. First eight weeks.

A	MTWTF	8/10		GYM	RADER

P. E. M. 152. Beginning Football. Introductory skills, rules and strategy. For physical education majors. Credit 2 hours. Second eight weeks.

A	MTWTF	8/10		GYM	VERSEN

RECREATION

Recreation 170. Outdoor Recreational Sports. Soccer, touch football, volleyball, softball, speedball. Credit 2 hours. First eight weeks.

A	MTWTF	8/10		GYM	BERRAFATO

Recreation 171. Indoor Recreational Sports. Badminton, handball, paddle tennis, squash, racquets, table tennis, weight lifting. Credit 2 hours. Second eight weeks.

A	MTWTF	8/10		GYM	BERRAFATO

Recreation 174. Camp Counseling. Objectives, administration, techniques, activity programs, evaluation. Credit 3 hours.

E	MWF	12		18	GEDVILAS

PHYSICAL EDUCATION FOR WOMEN

* Classes will meet for 1½ hours.

** Classes will meet for 1½ hours; students will be released early to participate in extra-curricular activities.

P. E. W. 100. Conditioning Activities. Credit 1 hour.

E	MWF	12	AUD	PESAVENTO
F	MWF	1	AUD	ANZALONE
H	MWF	3	AUD	THOMAS
* NP	TT	10	AUD	ANZALONE

P. E. W. 102. Modified Activities. Prescribed recreational sports, relaxation, and exercise. Credit 1 hour. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUD	ANZALONE

P. E. W. 105. Elementary Rhythms. Beginning dance techniques. Credit 1 hour.

B	MWF	9	AUD	CLAYPOOLE
C	MWF	10	AUD	CLAYPOOLE
* NP	TT	10	AUD	CLAYPOOLE

P. E. W. 106. Intermediate Rhythms. Intermediate dance techniques, solo and group dance compositions. Credit 1 hour. Prerequisite: Physical Education for Women 105 or consent of instructor.

* MN	TT	9	AUD	CLAYPOOLE

P. E. W. 123. Basketball. Credit 1 hour.

** RS	TT	1	AUD	ANZALONE

P. E. W. 124. Volleyball. Credit 1 hour.

D	MWF	11	AUD	PESAVENTO

P. E. W. 125. Softball. Credit 1 hour.

* TU	TT	3	AUD	THOMAS

P. E. W. 130. Badminton. Personal equipment to be furnished by student. Credit 1 hour.

G	MWF	2	AUD	ANZALONE

P. E. W. 131. Golf. Personal equipment to be furnished by student. Credit 1 hour.

*	PQ	TT	11	AUD	PESAVENTO

P. E. W. 132. Bowling. Credit 1 hour.

**	RS	TT	1	ABBOTT HALL	THOMAS

P. E. W. 134. Tennis—Archery. Personal equipment to be furnished by the student. Credit 1 hour.

*	QR	TT	12	AUD	ANZALONE

P. E. W. 142. Ballroom Dance. Credit 1 hour.

	G	MWF	2	AUD	THOMAS

P. E. W. 144. Elementary Folk Dance. Credit 1 hour.

	D	MWF	11	AUD	BARTON

P. E. W. 152. Basketball and Softball. Credit 1 hour. For Physical Education majors.

	C	MTWTF	10	AUD	PESAVENTO

P. E. W. 154. Tumbling, Apparatus and Tennis. Credit 2 hours. For Physical Education majors.

	B	MTWTF	9	AUD	PESAVENTO

Dance 160. Beginning Contemporary Dance. Credit 2 hours. For Physical Education majors.

	F	MTWTF	1	AUD	CLAYPOOLE

Dance 235. Square and Ballroom Dance. For Physical Education majors. Methods of teaching and directing ballroom and American square dances in school and community groups, with emphasis on organization and leadership. Credit 1 hour.

	E	MTWTF	12	AUD	CLAYPOOLE

Phys. Sci. 101. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	B	WF	9	204	MELOY
LAB	1	W	10/1	85	MILLER
QUIZ	1	F	10	74	MILLER
LAB	2	W	2/5	85	MILLER
QUIZ	2	M	3	74	MILLER
LAB	3	TH	9/12	85	MILLER
QUIZ	3	TU	9	74	MILLER
LAB	4	M	9/12	85	HEDBERG
QUIZ	4	W	10	76	HEDBERG

Phys. Sci. 102. Introduction to the Physical Sciences. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101.

LEC	M	TT	9	204	MELOY
LAB	11	F	9/12	85	COWIN
QUIZ	11	W	10	74	COWIN
LAB	12	F	1/4	85	MELOY
QUIZ	12	M	2	75	MELOY
LAB	14	M	2/5	85	COWIN
QUIZ	14	W	3	74	COWIN
LAB	15	TU	10/1	85	COWIN
QUIZ	15	TH	10	74	COWIN

Physics 101. General Physics (Mechanics, Heat, Sound). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Trigonometry.

QUIZ	C1	WF	10	144	JOHNSON
LAB	C	TH	8/11	123	JOHNSON
QUIZ	G1	WF	2	144	BESS
LAB	G	TU	11/2	123	BESS
QUIZ	L1	TT	8	134	MORAINE
LAB	L	W	8/11	123	MORAINE
QUIZ	N1	TT	10	134	SKADELAND
LAB	N	W	12/3	123	SKADELAND
QUIZ	P1	TT	11	134	PAPPADEMOS
LAB	P	F	12/3	123	PAPPADEMOS
QUIZ	Q1	TT	12	134	ANDERSON
LAB	Q	F	3/6	123	ANDERSON
QUIZ	R1	TT	1	134	CHANDLER
LAB	R	M	3/6	123	CHANDLER

Physics 102. General Physics (Electricity, Magnetism, Light, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Physics 101.

LEC	X	W	10	127	
LEC	Y	W	1	127	
QUIZ	M1	TT	9	134	MORAINE
LAB	M	F	8/11	122	MORAINE
QUIZ	N1	TT	10	144	ANDERSON
LAB	N	M	8/11	122	ANDERSON
QUIZ	E1	MF	12	144	MCNEIL
LAB	E	TU	11/2	122	MCNEIL
QUIZ	F1	MF	1	144	RAILSBACK
LAB	F	TU	11/2	122	RAILSBACK

LEC	X	TU	11	127	
LEC	Y	TU	1	127	
QUIZ	C1	MWF	10	134	SILKETT
LAB	C	TH	8/11	117	SILKETT
QUIZ	E1	MWF	12	134	WILBUR
LAB	E	TH	11/2	117	WILBUR
QUIZ	F1	MWF	1	134	LIVERMORE
LAB	F	TU	3/6	117	LIVERMORE
QUIZ	H1	MWF	3	134	LIVERMORE
LAB	H	TH	3/6	117	LIVERMORE

Physics 106. General Physics (Mechanics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Credit or registration in Mathematics 133.

LEC	X	TH	11	127	
QUIZ	B1	MWF	9	134	WILBUR
LAB	B	TU	8/11	122	WILBUR
QUIZ	E1	MWF	12	113	SILKETT
LAB	E	TH	3/6	122	SILKETT
QUIZ	G1	MWF	2	134	JOHNSON
LAB	G	TU	3/6	122	JOHNSON

Physics 107. General Physics (Electricity, Magnetism, Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	M	10	127	
LEC	Y	M	1	127	
QUIZ	B1	WF	9	144	MINKLER
LAB	B	TU	8/11	123	MINKLER

QUIZ	R1	TT	1	144	SKADELAND
LAB	R	F	12/3	122	SKADELAND
QUIZ	T1	TT	3	144	CHANDLER
LAB	T	W	3/6	122	CHANDLER

Physics 108. General Physics (Heat, Sound, Light). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	F	10	127	
LEC	Y	F	1	127	
QUIZ	A1	MW	8	134	WEISSMAN
LAB	A	TH	8/11	124	WEISSMAN
QUIZ	C1	MW	10	113	WEISSMAN
LAB	C	TU	8/11	124	WEISSMAN
QUIZ	P1	TT	11	144	MINKLER
LAB	P	M	12/3	124	MINKLER
QUIZ	R1	TT	1	113	PAPPADEMOS
LAB	R	M	3/6	124	PAPPADEMOS
QUIZ	T1	TT	3	134	PAPPADEMOS
LAB	T	W	3/6	124	PAPPADEMOS

Physics 341. Electricity and Magnetism. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Credit 4 hours. Prerequisite: General physics and calculus.

QUIZ	G1	MWF	2	208	MCNEIL
LAB	G	TH	3/6	208	MCNEIL

Pol. Sci. 103. Introduction to Political Science. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: Scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. Credit 3 hours.

E1	MWF	12	37	RAKOVE

Pol. Sci. 104. Introduction to International Politics. This is designed as a survey course. Topics to be covered will include the following: The development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. Credit 3 hours.

F1	MWF	1	76	BARBER

Pol. Sci. 150. American Government: Organization and Powers. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	28	BARBER
C1	M	10	14	RAKOVE
	WF	10	18	RAKOVE
E1	MWF	12	82	BARBER
H1	MWF	3	82	BARBER
Q1	TT	12	18	RAKOVE
	TU	1	21	RAKOVE
T1	TT	3	20	RAKOVE
	TH	4	20	RAKOVE

Pol. Sci. 151. American Government: Functions. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Credit 3 hours. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

F1	MW	1	13	RAKOVE
	F	1	14	RAKOVE

Psych. 100. Introduction to Psychology. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Credit 4 hours. Prerequisite: Second semester freshman standing.

(Lecture and quiz sections in this course are coordinate. Quiz sections must be chosen from one of the groups listed directly beneath this particular section.)

LEC	B1	WF	9	218	HOWARD
	C1	MW	10	28	HOWARD
	D1	WF	11	20	V LIPMAN
	M1	TT	9	17	HOWARD
	N1	TT	10	17	V LIPMAN
	P1	TT	11	17	V LIPMAN
LEC	Q1	TT	12	213	E LIPMAN
	E1	WF	12	21	V LIPMAN
	F1	WF	1	28	TYROLER
	G1	WF	2	28	TYROLER
	R1	TT	1	17	V LIPMAN
	T1	TT	3	16	V LIPMAN

Psych. 135. Statistical Methods in Psychology. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. Credit 3 hours. Prerequisite: Psychology 100.

B1	MWF	9	80	EELLS

Psych. 145. Industrial Psychology. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Credit is not given for both Psych. 145 and Psych. 245 at Urbana. Credit 3 hours. Prerequisite: Psychology 100.

A1	MWF	8	28	HOWARD
E1	MWF	12	28	HOWARD

Psych. 150. Personality and Human Relations. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Credit 3 hours. Prerequisite: Psychology 100 or equivalent.

LEC	C1	WF	10	218	E LIPMAN
	B1	M	9	14	TYROLER
	D1	M	11	28	TYROLER
	N1	TU	10	20	E LIPMAN

RHETORIC

Rhetoric 100. Freshman Remedial Rhetoric and Composition. Intensive review of fundamentals, with considerable practice in composition. Open to students who fail the placement test for admission to Rhetoric 101. Students passing this course will be admitted to Rhetoric 101 without further examination. No credit.

Admission to sections marked (*) requires consent of the Division of Humanities.

	B1	MWF	9	116	KENNY
	C1	MWF	10	116	KENNY
	D1	MWF	11	116	KENNY
	D2	MWF	11	209	DAVIS
	E1	MWF	12	209	DAVIS
*	E2	MTWTF	12	228	KRSTEIN/HOSKINS
	F1	MWF	1	116	KENNY
*	F2	MTWTF	1	228	KRSTEIN/HOSKINS
	G1	MWF	2	202	HEGIE
	H1	MWF	3	211	HEGIE
	H2	MWF	3	116	STAR
*	H3	MTWTF	3	228	KRSTEIN/HOSKINS
	M1	M	9	220	LEONHARD
		TT	9	201	
	N1	MTT	10	203	CARLSON
	N2	MTT	10	206	TIMMIS

P1	M	11	227	TIMMIS
	TT	11	209	
Q1	M	12	219	S MILLER
	TT	12	116	
R1	MTT	1	203	CARLSON

Rhetoric 101. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

A1	MWF	8	116	COX
B1	MWF	9	201	COX
C1	M	10	225	J JOHNSON
	WF	10	206	
C2	M	10	219	HEGIE
	WF	10	203	
D1	M	11	225	J JOHNSON
	WF	11	216	
D2	M	11	221	HEGIE
	WF	11	203	
E1	M	12	221	HIPPLE
	WF	12	203	
E2	MWF	12	202	COX
E3	MWF	12	201	ATWOOD
F1	MWF	1	201	ATWOOD
F2	MWF	1	205	KARANIKAS

G1	MWF	2	209	KERWICK
G2	MWF	2	116	STAR
G3	MWF	2	211	RUDIN
G4	MWF	2	203	SIDNEY
H1	M	3	214	HIPPLE
	WF	3	203	
H2	MWF	3	209	KARANIKAS
H3	MWF	3	219	KERIWCK
J1	MWF	4	206	HIPPLE
J2	MWF	4	201	WEISS
M1	M	9	221	STRONKS
	TT	9	203	
M2	MTT	9	205	LOVE
N1	M	10	223	STRONKS
	TT	10	211	
N2	M	10	222	LEONHARD
	TT	10	205	
P1	MTT	11	206	MUNRO
P2	MTT	11	205	JACKMAN
Q1	M	12	220	LEONHARD
	TT	12	201	
Q2	MTT	12	214	TIMMIS
R1	M	1	202	GALLAGHER
	TT	1	201	
R2	M	1	215	GRIEST
	TT	1	209	
T1	MTT	3	206	TIMMIS
T2	MTT	3	203	GALLAGHER

Rhetoric 102. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	201	DAVIS
A2	MWF	8	203	FRIEND
B1	M	9	223	MACKIN
	WF	9	202	
B2	MWF	9	211	I MILLER
B3	MWF	9	203	DAVIS
B4	MWF	9	209	VEST
C1	M	10	226	RUDIN
	WF	10	209	
C2	MWF	10	211	I MILLER
C3	MWF	10	224	WILLETT
C4	MWF	10	201	ATWOOD
C5	M	10	220	WRIGHT
	WF	10	212	
D1	M	11	223	WILLETT
	WF	11	206	
D2	M	11	224	FRIEND
	WF	11	211	
D3	MWF	11	229	MACKIN
D4	M	11	222	SIDNEY
	WF	11	205	
E1	MWF	12	222	MACKIN
E2	MWF	12	227	MCNAMARA

E3	MWF	12	211	I MILLER
E4	MWF	12	116	STAR
E5	MWF	12	101	CASSELL
F1	MWF	1	211	FRIEND
F2	MWF	1	209	KERWICK
F3	MWF	1	206	WILLETT
G1	MWF	2	94	CASSELL
G2	MWF	2	223	MCNAMARA
G3	MWF	2	201	WEISS
H1	MWF	3	94	CASSELL
H2	MWF	3	202	WEISS
H3	MWF	3	212	SIDNEY
J1	MWF	4	223	MCNAMARA
J2	MWF	4	94	SIDNEY
J3	MWF	4	116	STAR
L1	MTT	8	202	LOVE
L2	MTT	8	206	MUNRO
M1	MTT	9	202	CRAWLEY
M2	TT	9	209	JORDAN
	F	9	206	
N1	M	10	227	GRIEST
	TT	10	224	
N2	MTT	10	209	KOGAN
N3	MTT	10	202	CRAWLEY
N4	M	10	74	S MILLER
	TT	10	201	

P1	MTT	11	201	NICHOLAS
P2	MTT	11	211	KOGAN
P3	TT	11	226	BLUM
	F	11	201	
P4	MTT	11	203	CARLSON
P5	MTT	11	202	CRAWLEY
P6	TTF	11	74	RUNYAN
Q1	M	12	224	GRIEST
	TT	12	209	
Q2	MTT	12	203	LOVE
Q3	TT	12	202	SCHILLER
	F	12	214	
Q4	MTT	12	206	MUNRO
Q5	M	12	80	NICHOLAS
	TT	12	82	
R1	M	1	219	S MILLER
	TT	1	206	
R2	TT	1	205	JORDAN
	F	1	212	
R3	TTF	1	202	RUNYAN
R4	TTF	1	94	SCHILLER
T1	MTT	3	201	CARLSON
U1	MTT	4	203	GALLAGHER

Rhetoric 133. Principles of Composition. Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit 3 hours. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

D1	M	11	220	KARANIKAS
	WF	11	202	

Rhetoric 143. Intermediate Expository Writing. Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit 3 hours. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

F1	M	1	221	RUDIN
	WF	1	203	

Rhetoric 144. Narrative Writing. Practice in description, narrative sketches, stories. Credit 3 hours. Prerequisite: Rhetoric 101 and 102; sophomore standing.

E1	M	12	223	RUDIN
	WF	12	206	

Rhetoric 151. Business Letter Writing. Study of the correspondent's problems in business and practice in writing letters, with emphasis on organization, persuasion, and presentation from the reader's point of view. For the student whose career will require competence in writing letters. Credit 3 hours. Prerequisite: Rhetoric 101 and 102.

C1	MWF	10	205	OLEKSY
E1	MWF	12	205	OLEKSY
G1	MWF	2	205	OLEKSY
H1	MWF	3	205	OLEKSY
M1	MTT	9	206	MUNRO

Soc. Sci. 111. The Individual in Society. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	MW	2	218	BOLTON
	H1	MW	3	97	BOLTON
	M1	TT	9	21	BOLTON
	N1	TT	10	21	BOLTON
	Q1	TT	12	20	BOLTON

Soc. Sci. 112. Bases of American Life. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	218	BILL
	C1	MWF	10	82	BILL
	F1	MWF	1	82	BILL
	P1	MTT	11	82	RIDDLE

Soc. Sci. 113. World Patterns and World Problems. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	M	9	218	COLBY
	M1	TTF	9	14	COLBY
	Q1	MTT	12	14	COLBY
	R1	TTF	1	13	CUTSHALL

Soc. Sci. 116. Family Living. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Credit 4 hours. Prerequisite: Sophomore standing or consent of instructor.

LEC	D1	WF	11	218	STAFF
	B1	WF	9	16	KLASSEN
	P1	TT	11	23	LIPMAN

SOCIOLOGY

Sociol. 100. Introduction to Sociology. Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	24	CORLEY
G1	MWF	2	97	KLASSEN
Q1	TT	12	17	CORLEY
	F	12	16	CORLEY

Sociol. 140. Social Control. The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

C1	MW	10	37	CORLEY
	F	10	19	CORLEY

Sociol. 276. Sociology of the City. Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	76	KLASSEN

SPANISH

Spanish 101. Elementary Spanish. For students who have no credit in Spanish. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

B1	TWTF	9	225	MARSH
C1	TWTF	10	225	MARSH
H1	TWTF	3	225	TORT

Spanish 102. Elementary Spanish. Continuation of Spanish 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

A1	TWTF	8	225	MARSH
D1	TWTF	11	225	TORT
F1	TWTF	1	225	TORT

Spanish 103. Intermediate Spanish. Rapid reading, review of grammar, composition, conversation. Credit 4 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

C1	TWTF	10	227	PATLOGAN
E1	TWTF	12	225	TORT

Spanish 104. Intermediate Spanish. Continuation of Spanish 103. Credit 4 hours. Prerequisite: Spanish 103 or three years of high school Spanish.

B1	TWTF	9	227	PATLOGAN
D1	TWTF	11	227	PATLOGAN

Spanish 113. Elementary Composition and Conversation. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Credit 2 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

R1	TT	1	227	PATLOGAN

Spanish 202. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. Credit 3 hours. Prerequisite: Spanish 201 or consent of instructor.

E1	MWF	12	229	MARSH

SPEECH

Group Remedial Speech. Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Service, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor. No credit.

Dates: Sec.P1--February 16-April 3.
Sec.E1--April 6-May 27.

P1	TT	11	300	RIGLER
E1	WF	12	300	HOSKINS

Speech 101. Principles of Effective Speaking. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

B1	MWF	9	216	ARMOLD
C1	MWF	10	216	HOVDE
D1	MWF	11	217	HOVDE
D2	MWF	11	226	ARMOLD
E1	MWF	12	216	HOVDE
E2	MWF	12	217	KUNDRAT
F1	MWF	1	216	PITT
F2	MWF	1	217	KUNDRAT
G1	MWF	2	216	HOVDE
G2	MWF	2	217	PITT
H1	MWF	3	216	CREWS
J1	MWF	4	216	CREWS
M1	MTT	9	217	PITT
N1	MTT	10	221	THOMPSON
P1	MTT	11	216	PITT
Q1	M	12	226	GOULSON
	TT	12	222	
R1	M	1	220	CREWS
	TT	1	217	

Speech 105. Voice and Articulation. A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

B1	MWF	9	219	HOSKINS
C1	MWF	10	217	HOSKINS

Speech 107. Parliamentary Procedure. Principles and practice of parliamentary procedure. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

P1	TT	11	217	THOMPSON

Speech 111. Business and Professional Speaking. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

N1	TT	10	217	PITT

Speech 141. Oral Interpretation of Literature. Principles of interpretation, analysis, and oral reading of prose literature and verse. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	216	GOULSON
Q1	TT	12	216	CREWS
R1	TT	1	216	ARMOLD

Speech 161. Fundamentals of Acting. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Credit 3 hours. Prerequisite: Speech 141.

R1	M	1	226	GOULSON
	TT	1	211	

Speech 164. Radio Speaking. Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion; microphone experience. Credit 2 hours. Prerequisite: Consent of instructor.

N1	TT	10/12	451	ARMOLD

T. A. M. 150. Analytical Mechanics (Statics). Resultants of force systems; distributed forces, center of gravity and centroids; equilibrium of coplanar and non-coplanar forces; internal forces in trusses and frames; friction; virtual work. Credit 2 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

R1	TT	1	110

T. A. M. 151. Analytical Mechanics (Statics). Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Credit 3 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

C1	MWF	10	110
F1	MWF	1	110

T. A. M. 154. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. Credit 4 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

B1	MWTF	9	113
J1	MTWF	4	113

T. A. M. 156. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211. Credit 5 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

D1	MTWTF	11	113

T. A. M. 171. Elements of Mechanics (Statics). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Credit 3 hours. Prerequisite: Mathematics 123.

G1	MWF	2	110

T. A. M. 172. Strength of Materials. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 171.

D1	MWF	11	110

T. A. M. 211. Analytical Mechanics (Dynamics). Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

B1	MWF	9	110
J1	MWF	4	110

T. A. M. 221. Elementary Mechanics of Deformable Bodies. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

A1	MWF	8	113
F1	MWF	1	113

T. A. M. 223. Mechanical Behavior of Solids. Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Credit 1 hour. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	M	8/10	61
B	F	10/12	61
C	TH	12/2	61
D	TU	3/5	61

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TIME TABLE

FIRST SEMESTER, 1959-1960

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Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-registration Advisement Schedule..... 2
Instructions for Registration..... 3
Registration Schedule, First Semester..... 5
Schedule of Tuition and Fees..... 6
Calendar, First Semester..... 7
Chicago Undergraduate Division Calendar..... 8
Urbana Calendar..... 9
Final Examinations Schedule..... 10
Accountancy..... 11
Anthropology..... 12
Architecture..... 13
Art..... 14
Biological Sciences..... 16
Business Law..... 19
Chemistry..... 20
Civil Engineering..... 27
Economics..... 28
Education..... 30
Electrical Engineering..... 30
English..... 31
French..... 33
General Engineering..... 34
Geography..... 36
Geology..... 37
German..... 38
History..... 39
Humanities..... 40
Hygiene..... 41
Management..... 41
Marketing..... 42
Mathematics..... 42
Mechanical Engineering..... 47
Military Science and Tactics..... 48
Music..... 48
Pharmacy..... 49
Philosophy..... 49
Physical Education for Men..... 50
Recreation..... 54
Physical Education for Women..... 54
Physical Sciences..... 56
Physics..... 57
Political Science..... 60
Psychology..... 61
Rhetoric..... 62
Social Sciences..... 70
Sociology..... 71
Spanish..... 71
Speech..... 72
Theoretical and Applied Mechanics..... 74

PRE-REGISTRATION ADVISEMENT SCHEDULE
FIRST SEMESTER 1959-60

PLACE: South wing, second floor, Navy Pier

Use the south wing entrance.

COMMERCE AND ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, September 14	1 p.m. - 4 p.m.
F - K	Tuesday, September 15	9 a.m. - 12 noon
L - Q	Tuesday, September 15	1 p.m. - 4 p.m.
R - Z	Wednesday, September 16	9 a.m. - 12 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS
Monday, September 14

A - BRZ..... 1 p.m.
BS - DON..... 2 p.m.
DOO - GRAM..... 3 p.m.

Tuesday, September 15

GRAN - JOH.....	9 a.m.		NOS - ROC.....	1 p.m.	
JOI - MAC.....	10 a.m.		ROD - SUL.....	2 p.m.	
MAD - NOR.....	11 a.m.		SUM - Z.....	3 p.m.	

NEW STUDENTS (Liberal Arts and Sciences only)
Wednesday, September 16

A - COK.....	9 a.m.		KLF - NEK.....	1 p.m.	
COL - GN.....	10 a.m.		NEL - SMH.....	2 p.m.	
GO - KLE.....	11 a.m.		SMI - Z.....	3 p.m.	

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

No. 2 DEAN'S PROGRAM CARD

4. After the No. 2 card has been made out by your adviser and he has signed it, write your adress and telephone number on the front of the No. 2 Dean's Program Card. Turn card over and complete the back in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in the box provided (further indicated by arrows) but do not write your name on these cards.

No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and left margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with program on the No. 2 Dean's program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2 and then proceed to Station No. 3 for class card check.

11. All veterans stop at Station 4.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

12. Submit all cards to the Recorder's fee cards clerks at Station 5 and obtain a No. 6 Fee Assessment Card and a No. 7 Fee Receipt Card. Write your name and address on the No. 7 Identification Card.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 5, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to the clerks at Station 7. Your cards should be presented in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in Military Science, report to Station 8.

16. You are now ready to pay your fees. Present your banded group of cards No. 1, 2, 3, and 5 cards, and No. 6, 7, and 4, (if applicable) to one of the cashiers. The banded group, No. 7 Identification Card, and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to the clerks at Station 12 in the following sequence: No. 7, 1, 2, 3, all No. 5 cards, and No. 4, if applicable. The clerks at this station will return only the No. 7 card to you.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

REGISTRATION SCHEDULE
First Semester, Fall, 1959 - 60

PLACE: South Wing, second floor, Navy Pier.

Use the south wing entrance.

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m. Friday, September 18, 1959, will be assessed a late registration fee of $5.00.

A - C	Thursday, September 17	8:30 a.m.
D - H	Thursday, September 17	11:30 a.m.
I - N	Thursday, September 17	1:30 p.m.
O - R	Thursday, September 17	10:30 a.m.
S - Z	Thursday, September 17	9:30 a.m.

NEW STUDENTS

A - B	Friday, September 18	8:30 a.m.
C - D	Thursday, September 17	2:30 p.m.
E - G	Friday, September 18	9:30 a.m.
H - K	Thursday, September 17	3:30 p.m.
L - MIL	Friday, September 18	2:30 p.m.
MIM - P	Friday, September 18	1:30 p.m.
Q - SO	Friday, September 18	11:30 a.m.
SP - Z	Friday, September 18	10:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m., Friday, September 18.

All University offices are closed on Saturday, September 19, 1959.

Late registration begins on Monday, September 21, 1959.

Instruction begins on Monday, September 21, 1959.

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more..... $ 75.00
(Eight hours or less pay tuition at the rate of $6.00 a semester hour).

Non-residents of Illinois taking nine hours or more..... $250.00
(Eight hours or less pay tuition at the rate of $20.00 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours..... $ 7.00
(Less than five hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours..... $ 11.00
(Less than nine hours $5.50 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours..... $ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DATE OF REGISTRATION

GENERAL DEPOSIT:

All new students, and all former students who were not in attendance at the Chicago Undergraduate Division during the second semester 1958/59 or the summer session 1959 must pay a General Deposit fee of..... $ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed the first day of late registration, Monday, September 21, 1959.

Late registration fee..... $ 5.00

CALENDAR

First Semester, Fall, 1959

Tues., Sept. 8 - Wed., Sept. 16	Orientation Period.
Thurs., Sept. 17 - Fri., Sept. 18	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, Sept. 18, for registration).
Mon., Sept. 21	Instruction Begins.
Tues., Sept. 22, 9:30 a.m.	Changes to adjust conflicts in program.
Thurs., Sept. 24, 1:00 p.m.	Earliest time at which program changes may be made for personal convenience.
Fri., Oct. 2, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Nov. 6, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 13, 12:00 noon	Mid-semester grades are due.
Fri., Nov. 13, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Wed., Nov. 25, 6:00 p.m.	Thanksgiving Vacation Begins.
Mon., Nov. 30, 8:00 a.m.	Thanksgiving Vacation Ends.
Thurs., Dec. 3	Illinois Day (State admitted to Union, 1818) Not a holiday.
Thurs., Dec. 3, 4:00 p.m.	Students withdrawing on or after this date must petition for readmission.
Fri., Dec. 11, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals.
Fri., Dec. 18, 6:00 p.m.	Christmas Vacation Begins.
Mon., Jan. 4, 8:00 a.m.	Christmas Vacation Ends.
Fri., Jan. 15 - Fri., Jan. 22	Semester Examinations.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

ACADEMIC CALENDAR 1959-60

First Semester (Fall 1959)

Sept. 8, Tues.- Sept. 16, Wed.	Orientation Period
Sept. 17, Thurs. - Sept. 18, Fri.	Registration
Sept. 21, Mon.	Instruction begins
Nov. 25, Wed., 6:00 p.m.	Thanksgiving vacation begins
Nov. 30, Mon., 8:00 a.m.	Thanksgiving vacation ends
Dec. 3, Thurs.	Illinois Day (State admitted to Union, 1818--Not a holiday)
Dec. 18, Fri., 6:00 p.m.	Christmas vacation begins
Jan. 4, Mon., 8:00 a.m.	Christmas vacation ends
Jan. 15, Fri. - Jan. 22, Fri.	Semester Examinations

Second Semester (Spring 1960)

Jan. 29, Fri. - Feb. 3, Wed.	Orientation Period
Feb. 4, Thurs. - Feb. 5, Fri.	Registration
Feb. 8, Mon.	Instruction begins
Mar. 2, Wed.	University Day (University opened, 1868--Not a holiday)
Apr. 14, Thurs., 6:00 p.m.	Easter vacation begins
Apr. 20, Wed., 8:00 a.m.	Easter vacation ends
May 13, Fri.	Honors Day
May 30, Mon.	Memorial Day (Holiday)
May 26, Thurs. - Jun. 3, Fri.	Semester Examinations

Summer Session 1960

Jun. 17, Fri.	Registration
Jun. 20, Mon.	Instruction begins
Jul. 4, Mon.	Independence Day (Holiday)
Aug. 12, Fri.	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA

ACADEMIC CALENDAR 1959 - 60

First Semester (Fall 1959)

Sept. 8, Tues. - Sept. 11, Fri.	Entrance Examinations
Sept. 14, Mon. - Sept. 19, Sat.	Freshman Week & Registration
Sept. 21, Mon.	Instruction begins
Nov. 25, Wed., 1:00 p.m.	Thanksgiving vacation begins
Nov. 30, Mon., 1:00 p.m.	Thanksgiving vacation ends
Dec. 3, Thurs.	Illinois Day (State admitted to the Union, 1818)
Dec. 19, Sat., 1:00 p.m.	Christmas vacation begins
Jan. 4, Mon., 8:00 a.m.	Christmas vacation ends
Jan. 21, Thurs.	Study Day, classes dismissed
Jan. 22, Fri. - Jan. 30, Sat.	Semester Examinations

Second Semester (Spring 1960)

Feb. 2, Tues. - Feb. 5, Fri.	Entrance Examinations
Feb. 8, Mon. - Feb. 10, Wed.	Registration
Feb. 11, Thurs.	Instruction begins
Mar. 2, Wed.	University Day (University opened, 1868)
Apr. 12, Tues., 1:00 p.m.	Spring vacation begins
Apr. 18, Mon., 1:00 p.m.	Spring vacation ends
Apr. 29, Fri.	Honors Day (Classes dismissed at noon)
May 30, Mon.	Memorial Day (Holiday)
May 30, Mon.	Study Day (Classes dismissed)
May 31, Tues. - Jun. 8, Wed.	Semester Examinations
Jun. 18, Sat.	Commencement exercises

Summer Session 1960

Jun. 7, Tues. - Jun. 10, Fri.	Entrance Examinations
Jun. 20, Mon.	Registration
Jun. 21, Tues.	Instruction begins
Jul. 4, Mon.	Independence Day (Holiday)
Aug. 12, Fri. - Aug. 13, Sat.	Summer Session Examinations

FINAL EXAMINATIONS SCHEDULE, I 1959-60
January 15 through January 22, 1960

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes Meeting at	Classes having at least ONE session on Wednesday will be examined at: 9 a.m. to 11 a.m.	Classes having NO session on Wednesday will be examined at: 12 noon to 2 p.m.	All classes meeting at 8, 2, or 4 will be examined at: 3 p.m. to 5 p.m.
8 a.m.	———	———	Monday, Jan. 18
9 a.m.	Tuesday, Jan. 19	Tuesday, Jan. 19	———
10 a.m.	Wednesday, Jan. 20	Wednesday, Jan. 20	———
11 a.m.	Thursday, Jan. 21	Thursday, Jan. 21	———
12 noon	Friday, Jan. 22	Friday, Jan. 22	———
1 p.m.	Friday, Jan. 15	Friday, Jan. 15	———
2 p.m.	———	———	Friday, Jan. 22
3 p.m.	Monday, Jan. 18	Monday, Jan. 18	———
4 p.m.	———	———	Wednesday, Jan. 20

Combined Section examinations from 3 p.m. to 5 p.m. on:

Friday, January 15
Tuesday, January 19
Thursday, January 21

ACCOUNTANCY

Accy. 101. Principles of Accounting. Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	19	MALINOSKY
C1	MWF	10	24	KABBES
C2	MWF	10	19	MALINOSKY
D1	MWF	11	38	FOX
E1	MWF	12	38	MALINOSKY
E2	MWF	12	23	LARSON
F1	MWF	1	20	ANDREWS
G1	MWF	2	17	HEDISH
G2	MWF	2	20	LIPKIN
H1	MWF	3	20	LARSON
J1	MWF	4	38	HEDISH
J2	MWF	4	24	KABBES
M1	MTT	9	21	ANDREWS
N1	MTT	10	21	ANDREWS
P1	MTT	11	17	HEDISH
Q1	MTT	12	18	LIPKIN
R1	MTT	1	21	MORICI
T1	MTT	3	24	FOX
T2	MTT	3	19	MORICI
U1	MTT	4	19	MORICI

Accy. 105. Accounting Procedure. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

C1	MWF	10	23	SCHNEIDER
D1	MWF	11	18	LIPKIN
E1	MWF	12	24	SCHNEIDER
G1	MWF	2	24	SCHNEIDER
M1	MTT	9	20	LIPKIN
P1	MTT	11	16	MORICI

Accy. 106. Elementary Cost Accounting. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

E1	MWF	12	20	ANDREWS
F1	MWF	1	22	KABBES
G1	MWF	2	22	KABBES
N1	MTT	10	17	HEDISH
R1	MTT	1	38	FOX

Accy. 108. Intermediate Accounting. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Credit 3 hours. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	23	SCHNEIDER
G1	MWF	2	19	MALINOSKY

ANTHROPOLOGY

Anthrop. 102. Introduction to Anthropology: The Origin of Man and Culture. An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology. Credit 3 hours.

Q1	TT	12	16	WARREN
	TH	1	37	
U1	MTT	4	14	WARREN

Arch. 101. Introduction to Architecture. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107. Credit 3 hours.

LECT	C	W	10	251
LAB	A	MTTF	8/10	241
LAB	B	MTTF	10/12	241
LAB	C	MTTF	12/2	241
LAB	D	MTTF	3/5	241

Arch. 113. History of Ancient Architecture. A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Credit 2 hours. Prerequisite: Architecture 131 or sophomore standing.

LECT	N	TT	11	251

Arch. 131. Architectural Design. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Credit 3 hours. Prerequisite: Sophomore standing, Arch. 101, credit or registration in G.E. 108, and registration in Arch. 141.

LECT	R	W	2	251
LAB	A	MF	8/11	241
		W	9/11	241
LAB	B	TT	8/11	241
		W	9/11	241
LAB	C	TT	3/6	241
		W	3/5	241

Arch. 132. Architectural Design. Continued study of the fundamentals of architectural design. Credit 3 hours. Prerequisite: Architecture 131.

LEC	D	W	11	251
LAB	A	TT	8/11	242
		W	8/10	242
LAB	B	MF	3/6	242
		W	3/5	242

Arch. 133. Architectural Design. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Credit 3 hours. Prerequisite: Architecture 132, credit or registration in T.A.M. 150 or 171, and registration in Arch. 143.

A	MWF	8/11	242
B	MWF	3/6	242

Arch. 141. Materials and Methods of Construction I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Registration in Architecture 131.

S	MF	2	251

Arch. 142. Materials and Methods of Construction II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Credit 2 hours. Prerequisite: Architecture 141.

P	MF	11	251

Arch. 143. Materials and Methods of Construction III. Semi-fireproof construction, manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Credit 2 hours. Prerequisite: Architecture 142 and registration in Arch. 133.

R	TT	1	251

Arch. 214. History of Medieval Architecture. A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Credit 3 hours. Prerequisite: Architecture 113 or consent of instructor.

F	MWF	1	251

ART

Art 111. Survey of Art History. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. Credit 3 hours.

H	MWF	3	251

Art 115. Art Appreciation. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. Credit 3 hours.

B	MWF	9	251

Art 117. Drawing I. Theory and practice in the elements of drawing. Credit 3 hours.

A	TWT	11/2	91
B	TWT	3/6	91

Art 118. Drawing II. Continuation of Art 117. Credit 2 hours. Prerequisite: Art 117.

A	TT	8/11	83

Art 119. Design. Theory and practice in the elements of design. Credit 2 hours.

A	MF	11/2	241
B	TT	11/2	241

Art 120. Design. Continuation of Art 119. Credit 3 hours. Prerequisite: Art 119.

A	MWF	3/6	241

Art 181. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours.

A	MWF	8/10	83
B	MWF	10/12	83
C	MWF	12/2	83
D	MWF	2/4	83
E	MWF	4/6	83
F	TT	11/2	83
G	TT	3/6	83
H	MWF	4/6	84

Art 182. Freehand Drawing. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 181.

A	TT	11/2	91
B	MF	12/3	91

Art 183. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 182.

A	TT	8/11	91
B	MF	8/11	91
C	MF	3/6	91

Art 184. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture. Credit 2 hours. Prerequisite: Art 183.

A	MF	8/11	84
B	MF	12/3	84

Art 281. **Freehand Drawing.** Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184. Credit 2 hours.

A	TT	8/11	84
B	TT	3/6	84

BIOLOGICAL SCIENCES

Biology 101. **Fundamentals of Biology.** This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	B1	WF	9	210	GLASSMAN
LAB	1	TT	8/10	46	
LAB	2	TT	10/12	44	
LAB	3	TT	12/2	46	
LAB	4	TT	3/5	46	
LAB	5	M	2/4	48	
		F	2/4	46	
LAB	6	WF	12/2	48	
LEC	R1	TT	1	213	SPIRAKIS
LAB	7	TT	10/12	46	
LAB	8	M	10/12	48	
		F	10/12	46	
LAB	9	M	12/2	48	
		F	12/2	46	
LAB	10	MF	4/6	44	
LAB	11	MF	8/10	46	
LAB	12	WF	12/2	44	

LEC	C1	MW	10	210	PICKETT
LAB	13	MW	2/4	46	
LAB	14	M	4/6	48	
		W	4/6	44	
LAB	15	MW	12/2	46	
LAB	16	WF	4/6	48	
LAB	17	TT	8/10	48	
LAB	18	TT	10/12	48	
LEC	Q1	TT	12	210	PRESLEY
LAB	19	MW	10/12	46	
LAB	20	TT	8/10	44	
LAB	21	M	8/10	48	
		W	8/10	46	
LAB	22	TT	4/6	48	
LAB	23	WF	8/10	48	
LAB	24	WF	10/12	44	
LEC	T1	TT	3	213	NEWELL
LAB	25	TT	12/2	48	
LAB	26	WF	2/4	44	
LAB	27	TT	12/2	44	
LAB	28	M	8/10	44	
		F	8/10	43	
LAB	29	M	10/12	44	
		F	10/12	43	
LAB	30	M	12/2	44	
		F	12/2	43	

Biology 102. Fundamentals of Biology, Continued. Application of biological principles to the living world. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

LEC	E1	WF	12	210	GLASSMAN
LAB	1	TT	12/2	43	ROUFFA
LAB	2	MW	10/12	43	MADISON
LAB	3	MW	12/2	43	NEWELL
LAB	4	MW	4/6	43	NEWELL
LAB	5	TT	4/6	43	NEWELL

Biology 111. General Botany. The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor.

LEC	N1	TT	10	213	ROUFFA
LAB	1	WF	10/12	48	ROUFFA
LAB	2	WF	2/4	48	ROUFFA

Biology 121. Microbiology. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Credit 4 hours. Prerequisite: Biology 102 or consent of instructor.

LEC	M1	TT	9	65	MADISON
LAB	1	MW	8/10	43	MADISON

Biology 131. General Zoology. A survey of the animal kingdom, the phylogenetic relationships of animals, and classification. Emphasis is placed upon economically important and parasitic forms. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	D1	WF	11	210	SHOMAY
LAB	1	WF	8/10	44	PRESLEY

Biology 132. Comparative Vertebrate Anatomy. Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	C1	MWF	10	213	SHANK
LAB	1	MWF	8/10	45	SPIRAKIS
LAB	2	MWF	2/4	45	SHANK
LAB	3	TT	3/6	45	SHOMAY

Biology 141. Vertebrate Physiology. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

LEC	P1	TT	11	210	PICKETT SPIRAKS
LAB	1	TH	8/11	43	SPIRAKIS
QUIZ	1	TU	9	43	SPIRAKIS

Biology 161. Zoology for Pharmacy students. This course prepares the student in Pharmacy for the upper division studies in Physiology and in Pharmacology. Credit 4 hours.

LEC	G1	MWF	2	210	BOND
LAB	1	MWF	10/12	45	SCUDDER
LAB	2	MWF	12/2	45	BOND
LAB	3	MWF	4/6	45	BOND
LAB	4	TT	11/2	45	SHOMAY
LAB	5	TT	8/11	45	GLASSMAN

Biology 333. Vertebrate Embryology. The development of the vertebrate body and its organs. Lectures and laboratory. Credit 5 hours. Prerequisite: Biology 132, junior standing.

LEC	F1	MWF	1	210	SANGSTER
LAB	1	MWF	2/4	43	SANGSTER
LAB	2	TT	3/6	44	SCUDDER

BUSINESS LAW

Business Law 100. Basic Principles of Business Law. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Credit 3 hours. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

C1	MWF	10	38	FOX

Chem. 101. General Chemistry. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	N	TT	10	204	ELBINGER
LAB	1	MWF	8/10	53	JOHNSON
QUIZ	1	TT	8	74	JOHNSON
LAB	2	MWF	10/12	53	CASTEN
QUIZ	2	TT	11	80	CASTEN
LAB	3	MWF	1/3	53	
QUIZ	3	TT	1	75	
LAB	4	MWF	3/5	53	MILLER/LOTHIAN
QUIZ	4	TT	4	75	MILLER
LAB	5	MWF	12/2	53	SEABRIGHT
QUIZ	5	TT	12	80	SEABRIGHT
LEC	H	MW	3	210	ELBINGER
LAB	6	TT	11/2	53	JOHNSON
QUIZ	6	WF	1	75	JOHNSON
LAB	7	MWF	9/11	53	HERZOG
QUIZ	7	TT	9	80	HERZOG
LAB	8	MWF	10/12	53	ELBINGER
QUIZ	8	TT	3	74	ELBINGER
LAB	9	MWF	1/3	53	
QUIZ	9	TT	11	76	
LAB	10	MWF	4/6	53	SAVOY/ELBINGER
QUIZ	10	TT	3	206	SAVOY

Chem. 102. General Chemistry. For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

(The following sections are open to students in LAS and COMMERCE only.)

LEC	C	WF	10	204	MUELLER
LAB	11	TU	8/10	53	MUELLER
QUIZ	11	WF	8	74	MUELLER
LAB	12	F	12/2	53	MUELLER
QUIZ	12	TT	10	75	MUELLER
LAB	13	W	1/3	53	MUELLER
QUIZ	13	TT	12	76	MUELLER
LAB	14	M	2/4	53	HERZOG
QUIZ	14	TT	10	76	HERZOG
LAB	15	M	9/11	53	
QUIZ	15	WF	8	75	
LAB	16	F	2/4	53	LOTHIAN
QUIZ	16	MW	2	80	LOTHIAN
LAB	17	TH	9/11	53	
QUIZ	17	WF	11	74	
LAB	18	TU	9/11	53	
QUIZ	18	W	11	76	
		F	11	75	

(The following sections are open to students in the COLLEGE OF ENGINEERING only.)

LEC	M	TT	9	210	SCHRAGE
LAB	19	M	1/3	53	SCHRAGE/FARAG
QUIZ	19	WF	9	74	SCHRAGE
LAB	20	TH	12/2	53	DAFLER
QUIZ	20	WF	9	76	

LAB	21	W	8/10	53	DAFLER
QUIZ	21	MW	12	74	DAFLER
LAB	22	F	1/3	53	MANSFIELD
QUIZ	22	MW	2	75	MANSFIELD
LAB	23	TU	10/12	50	SEABRIGHT
QUIZ	23	WF	2	74	SEABRIGHT
LAB	24	W	1/3	50	FARAG
QUIZ	24	TT	10	80	FARAG
LAB	25	M	2/4	50	CASTEN
QUIZ	25	WF	3	75	CASTEN

Chem. 103. General Chemistry. For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 103 or 112.

(Lecture and laboratory sections in this course are coordinate. Laboratory sections must be chosen from one of the groups listed directly beneath the particular lecture selected.)

LEC	E	WF	12	204	BACHRACH
LAB	27	MW	8/10	50	SACKHEIM
QUIZ	27	TT	8	75	SACKHEIM
LAB	28	TT	9/11	50	SACKHEIM
QUIZ	28	WF	10	74	SACKHEIM
LAB	29	MW	1/3	50	CARBONARO
QUIZ	29	TT	11	75	CARBONARO
LAB	30	MF	8/10	50	DELFS
QUIZ	30	MF	10	76	DELFS
LAB	31	MF	2/4	50	HEDBERG
QUIZ	31	WF	1	76	HEDBERG
LAB	32	TT	9/11	50	DELFS
QUIZ	32	TT	8	80	DELFS

LEC	P	TT	11	204	BACHRACH
LAB	33	TT	9/11	50	CASTEN
QUIZ	33	WF	1	74	CASTEN
LAB	34	WF	10/12	50	CARBONARO
QUIZ	34	MF	9	80	CARBONARO
LAB	35	TT	12/2	50	CARBONARO
QUIZ	35	MW	3	80	CARBONARO
LAB	36	TT	3/5	50	BACHRACH
QUIZ	36	WF	3	74	BACHRACH
LAB	37	MF	10/12	50	DAFLER
QUIZ	37	MF	8	76	DAFLER
LEC	T	TT	3	204	KLAAS
LAB	39	MF	11/1	50	SACKHEIM
QUIZ	39	TT	12	74	SACKHEIM
LAB	40	MW	2/4	50	KLAAS
QUIZ	40	TT	12	75	KLAAS
LAB	41	TT	10/12	50	KLAAS
QUIZ	41	MW	11	75	KLAAS
LAB	42	TT	8/10	50	FARAG
QUIZ	42	MW	3	76	FARAG
LAB	43	TT	4/6	50	SAVOY
QUIZ	43	MW	4	75	BACHRACH

Chem. 104. Chemistry of the Metallic Elements. Limited to students in engineering curricula. Credit 4 hours. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105, 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

LEC	Q	TT	12	204	HUITEMA
LAB	46	MW	10/12	50	COWIN
QUIZ	46	TT	9	74	COWIN

LAB	47	TT	9/11	50	PERRY
QUIZ	47	MW	9	75	PERRY
LAB	48	WF	12/2	50	PERRY
QUIZ	48	TT	1	76	PERRY
LAB	49	MW	2/4	50	PERRY
QUIZ	49	MF	11	76	PERRY

Chem. 105. Inorganic Chemistry and Qualitative Analysis. For students who are not eligible for Chemistry 104 or 106. Credit 5 hours. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	R	TT	1	210	HUNT
LAB	51	MWF	8/10	53	LOTHIAN
QUIZ	51	TT	8	76	LOTHIAN
LAB	52	MWF	10/12	53	HUNT
QUIZ	52	TT	11	74	HUNT
LAB	53	MWF	1/3	53	HUNT/JOHNSON
QUIZ	53	TT	3	80	HUNT

Chem. 106. Inorganic Chemistry. Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit 5 hours. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104, 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	T	TT	3	210	RIETZ
LAB	61	MWF	3/5	50	RIETZ/JOHNSON
QUIZ	61	TT	4	74	RIETZ

Chem. 107. General Chemistry. For students in curricula in chemistry or chemical engineering. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

LEC	H	WF	3	204	WELDON
LAB	66	TT	10/12	53	WELDON
QUIZ	66	MWF	11	80	WELDON
LAB	67	TT	3/5	53	WELDON/COWIN
QUIZ	67	MTT	1	74	WELDON
LAB	68	TT	12/2	53	HERZOG
QUIZ	68	MWF	12	80	HERZOG

Chem. 109. General and Inorganic Chemistry. A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of general inorganic chemistry are advised to take a two-semester sequence instead of Chemistry 109. Not open to students who have college credit in chemistry. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the highest quarter of the class.

LEC	F	MWF	1	204	HUITEMA
LAB	71	F	9/12	50	HUITEMA
QUIZ	71	TT	1	80	HUITEMA
LAB	72	TU	11/2	50	DAFLER
QUIZ	72	MW	2	76	DAFLER
LAB	73	TH	9/12	50	
QUIZ	73	M	10	80	
		W	10	76	
LAB	74	W	3/6	50	LOTHIAN
QUIZ	74	TT	3	75	LOTHIAN
LAB	75	W	10/1	50	HEDBERG
QUIZ	75	M	12	76	HEDBERG
		F	12	74	

Chem. 110. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major in chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Credit 5 hours. Prerequisite: Chemistry 106 or equivalent.

LEC	Q	TT	12	65	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12	53	MANSFIELD
QUIZ	76	TT	9	75	MANSFIELD

Chem. 122. Elementary Quantitative Analysis. Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	N	TT	10	210	BABLER
LAB	81	MWF	9/12	54	GOTTLIEB
QUIZ	81	TU	9	76	GOTTLIEB
LAB	82	MWF	1/4	54	GOTTLIEB
QUIZ	82	TH	3	76	GOTTLIEB

Chem. 124. Quantitative Analysis. For all students in the chemistry curriculum and chemical engineering. Credit 5 hours. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	G	MW	2	204	BABLER
LAB	86	MWF	8/11	54	BABLER/KLAAS
QUIZ	86	F	2	80	BABLER
LAB	87	MWF	3/6	54	POTEMPA
QUIZ	87	TU	3	76	POTEMPA

Chem. 133. Elementary Organic Chemistry. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. Credit 5 hours. Prerequisite: Chemistry 105 or equivalent.

LEC	D	WF	11	204	CRUM
EXAM		M	11	204	
LAB	91	TT	9/12	52	CRUM
QUIZ	91	M	9	74	CRUM
LAB	92	MW	2/5	52	CRUM
QUIZ	92	F	2	75	CRUM
LAB	93	MW	8/11	52	SEABRIGHT
QUIZ	93	F	9	75	SEABRIGHT

Chem. 342. Physical Chemistry. Introduction to the study of chemical principles. Credit 3 hours. Prerequisite: Chemistry 124; Physics 106, 107 and 108, or two semesters of general physics with concurrent registration in the third semester; credit or registration in Mathematics 143; or equivalents.

LEC	C	MWF	10	75	SCHRAGE

Chem. 343. Physical Chemistry Laboratory. Quantitative experimental study of chemical principles. Credit 1 hour. Prerequisite: Credit or registration in Chemistry 342.

LAB	98	W	2/5	50A	SCHRAGE

C. E. 101. Elementary Surveying. Fundamental surveying operations. Credit 3 hours. Prerequisite: G.E. 101 and Credit or Registration in Mathematics 123.

A	TT	9/12	63
B	MF	2/5	63

C. E. 210. Properties of Soil. Identification and classification of earth materials; hydraulic and mechanical properties of soils; character of natural soil deposits; and appraisal of methods of subsurface exploration. Laboratory determination of the index properties of soils. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 221, Geology 150, and junior standing in engineering or architecture.

B1	MF	9	63
B	W	9/11	63

C. E. 214. Composition and Properties of Concrete. Properties and uses of cements, aggregates, mixing water, and admixtures; composition and properties of concrete mixtures; field practices in the production of concrete. Laboratory practice in the design and control of quality concrete. Credit 2 hours. Prerequisite: T.A.M. 223, or 224, and junior standing in engineering or architecture, or consent of instructor.

C	MF	10/12	63

C. E. 261. Theory of Determinate Structures. A study of the fundamental theory of statically determinate structures with applications to the evaluation of reactions, shears, and movements in beams and stresses in trusses for fixed and moving loads; introduction to deflection computations. Credit 3 hours. Prerequisite: Credit or registration in T.A.M. 221.

F1	MF	1	63
F	W	12/2	63

Econ. 100. Introduction to Business. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. Credit 3 hours.

B1	MWF	9	22	SHAW
B2	MWF	9	38	GRAMPP
C1	MWF	10	20	JUNG
D1	MWF	11	22	GRAMPP
E1	MWF	12	17	FERRERA
F1	MWF	1	17	FERRERA
G1	MWF	2	21	SHAW
G2	MWF	2	16	MILLER
H1	MWF	3	18	GELDARD
J1	MWF	4	23	JUNG
J2	MWF	4	22	MILLER
M1	MTT	9	18	GELDARD
N1	MTT	10	18	GELDARD
Q1	MTT	12	22	CRABB
R1	MTT	1	18	CRABB
T1	MTT	3	16	
U1	MTT	4	16	

Econ. 102. Principles of Economics I. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Credit 3 hours. Prerequisite: One year of college work.

D1	MWF	11	21	SHAW
E1	MWF	12	21	SHAW
G1	MWF	2	38	GRAMPP
H1	MWF	3	38	GRAMPP
M1	MTT	9	16	LARSON
N1	MTT	10	33	LARSON
R1	MTT	1	16	SELTZER
U1	MTT	4	20	SELTZER

Econ. 103. Principles of Economics II. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Credit 3 hours. Prerequisite: Economics 102.

D1	MWF	11	20	JUNG
G1	MWF	2	23	GILLETT
H1	MWF	3	23	JUNG

Econ. 108. Elements of Economics. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Credit 3 hours. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	24	DUNNE
F1	MWF	1	24	DUNNE
H1	MWF	3	21	FERRERA
J1	MWF	4	21	FERRERA
M1	MTT	9	17	MILLER
P1	MTT	11	19	MILLER
Q1	TT	12	17	
	F	12	18	
R1	TT	1	17	
	F	1	18	

Econ. 136. American Economic History. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Credit 3 hours. Open to freshmen and sophomores only.

C1	MWF	10	16	SELTZER
E1	MWF	12	16	SELTZER
H1	MWF	3	17	CRABB
J1	MWF	4	17	CRABB
R1	MTT	1	19	KNUDSON

Econ. 138. European Economic History. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Credit 3 hours. Open to freshmen and sophomores only.

G1	MWF	2	18	GELDARD

Econ. 170. Elements of Statistics. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Credit 3 hours. Prerequisite: Economics 102 or 108; sophomore standing.

QUIZ	B1	MW	9	33	DERRICK
LAB	1	F	9/11	33	DERRICK
QUIZ	D1	MW	11	33	DERRICK
LAB	2	F	11/1	33	DERRICK
QUIZ	G1	MW	2	33	DERRICK
LAB	3	F	2/4	33	DERRICK

EDUCATION

Ed. 101. Nature of the Teaching Profession. An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. Credit 2 hours.

B1	WF	9	17	RICKS
D1	WF	11	17	RICKS
N1	TT	10	16	RICKS
Q1	TT	12	28	RICKS

Ed. 201. Foundations of American Education. A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Credit 2 hours. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

R1	TT	1	28	LITTLE

ELECTRICAL ENGINEERING

E. E. 126. Electric Circuits and Fields. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Credit 4 hours. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	B1	MWF	9	113
LAB	B	TU	9/12	120
QUIZ	G1	MWF	2	113
LAB	G	TH	3/6	120

English 101. Introduction to Poetry. Understanding of poetry through the reading and discussion of representative poems. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	212	I MILLER
H1	MWF	3	212	F JOHNSON
J1	MWF	4	214	STRONKS
N1	M	10	219	JACKMAN
	TT	10	212	
P1	M	11	219	GALLAGHER
	TT	11	212	

English 102. Introduction to Drama. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	212	DAVIS
P1	M	11	220	LOVE
	TT	11	214	
R1	M	1	219	MACKIN
	TT	1	212	
T1	M	3	219	NICHOLAS
	TT	3	212	
U1	M	4	219	NICHOLAS
	TT	4	212	

English 103. Introduction to Fiction. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's "Pride and Prejudice," Balzac's "Pere Goriot," Arnold Bennett's "Old Wives' Tale," Dostoevski's "Crime and Punishment," Robert Penn Warren's "All the King's Men" and the anthology "Reading Modern Short Stories." Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	214	WEISS
G1	MWF	2	214	KERWICK
H1	MWF	3	214	HIPPLE
J1	MWF	4	212	CASSELL

L1	M	8	215	S MILLER
	TT	8	212	
M1	M	9	219	LEONHARD
	TT	9	212	
N1	M	10	220	GRIEST
	TT	10	215	
Q1	M	12	219	MCNAMARA
	TT	12	212	

English 113. American Literature. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	212	WRIGHT
F1	MWF	1	212	WEISS
H1	MWF	3	215	WILLETT
M1	M	9	220	KARANIKAS
	TT	9	214	

English 114. American Literature. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	MWF	11	212	WRIGHT
G1	MWF	2	212	STRONKS
L1	TT	8	214	SCHILLER
	F	8	219	
T1	M	3	220	KOGAN
	TT	3	214	

English 121. Chief English Writers Before 1800. "Canterbury Tales," "Utopia," two plays by Shakespeare, "Paradise Lost," "Gulliver's Travels," "Tom Jones," "Rasselas." This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	MWF	11	214	COX
G1	MWF	2	215	ATWOOD

English 122. Chief English Writers of the Nineteenth Century. Wordsworth, Byron, Carlyle's "Past and Present," Arnold's prose and poetry, FitzGerald's "The Rubaiyat of Omar Khayyam," readings from T. H. Huxley, Browning's poems, and one novel. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	212	J JOHNSON

English 123. Chief Modern English Writers. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	116	FREYER

English 131. Introduction to Shakespeare. Prerequisite: Sophomore standing or exemption from

C1	MWF	10	215	VEST

FRENCH

French 101. Elementary Course. Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	226	SKOGEN
B1	TWTF	9	222	LEIN
C1	TWTF	10	226	SKOGEN
C2	TWTF	10	222	LEIN
D1	TWTF	11	226	MEYER
E1	TWTF	12	226	SKOGEN
F1	TWTF	1	226	MEYER
H1	TWTF	3	226	MEYER
H2	TWTF	3	222	LUTTON
J1	TWTF	4	222	LUTTON

French 102. Elementary Course. Continuation of French 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	226	SKOGEN
E1	TWTF	12	222	LEIN

French 103. Modern French. Rapid reading of modern authors, syntax, and composition; some conversational practice. Credit 4 hours. Prerequisite: French 102 or two years of high school French.

B1	TWTF	9	224	SCHUYLER
C1	TWTF	10	224	SCHUYLER
E1	TWTF	12	224	MEYER
F1	TWTF	1	222	LEIN

French 104. Modern French. Continuation of French 103. Credit 4 hours. Prerequisite: French 103 or three years of high school French.

D1	TWTF	11	224	SCHUYLER

French 201. Introduction to French Literature. Credit 3 hours. Prerequisite: French 104 or four years of high school French.

R1	TTF	1	224	SCHUYLER

GENERAL ENGINEERING

G. E. 101. Elements of Drawing. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Credit 3 hours. Prerequisite: Plane geometry.

A1	MWF	8/10	135
A2	MWF	8/10	136
A3	MWF	8/10	137
A4	MWF	8/10	141
B1	MWF	10/12	135
B2	MWF	10/12	136
B3	MWF	10/12	137
B4	MWF	10/12	141
C1	MWF	12/2	135
C2	MWF	12/2	136
C3	MWF	12/2	137
C4	MWF	12/2	141
D1	MWF	2/4	135
D2	MWF	2/4	136
D3	MWF	2/4	137
D4	MWF	2/4	141
E1	MWF	4/6	135
E2	MWF	4/6	136
E3	MWF	4/6	137
F1	TT	8/11	135
F3	TT	8/11	137
F4	TT	8/11	141
F5	TT	8/11	143

G1	TT	11/2	135
G3	TT	11/2	137
G4	TT	11/2	141
G5	TT	11/2	143

G. E. 102. Engineering Geometry. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Credit 3 hours. Prerequisite: General Engineering 101.

A5	MWF	8/10	143
B5	MWF	10/12	143
C5	MWF	12/2	143
D5	MWF	2/4	143

G. E. 107. Architectural Projections. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Credit 2 hours. Prerequisite: Plane geometry.

A6	MWF	8/10	145
B6	MWF	10/12	145
C6	MWF	12/2	145
D6	MWF	2/4	145
E6	MWF	4/6	145
F6	TT	8/11	145
G6	TT	11/2	145

G. E. 108. Architectural Projections. Shades and shadows; oblique, isometric, and perspective drawings; developments. Credit 2 hours. Prerequisite: General Engineering 107.

A7	MWF	8/10	146
C7	MWF	12/2	146

G. E. 112. General Engineering Technology. For mechanical engineers. Credit 2 hours. Prerequisite: General Engineering 102, or consent of instructor.

F2	TT	8/10	136
G2	TT	12/2	136

G. E. 212. Graphical Calculations. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Credit 1 hour. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

N2	TT	10	136
P2	TT	11	136

GEOGRAPHY

Geog. 101. Elements of Geography. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit.

LEC	N1	TT	10	218	FINNEY
QUIZ	A1	MWF	8	13	RHEUMER
QUIZ	C1	MWF	10	13	CUTSHALL
QUIZ	D1	MWF	11	14	FINNEY
QUIZ	F1	MWF	1	13	RHEUMER
QUIZ	F2	M	1	17	CUTSHALL
		WF	1	14	
QUIZ	G1	MWF	2	13	FINNEY
QUIZ	Q1	TTF	12	13	FINNEY

Geog. 104. World Regional Geography. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

C1	MWF	10	14	COLBY
R1	MTT	1	14	COLBY

Geog. 105. Introductory Economic Geography. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

E1	MW	12	13	CUTSHALL
	F	12	14	

Geog. 111. Introductory Meteorology. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Credit 3 hours. Prerequisite: Geography 101 or consent of instructor.

B1	MWF	9	13	RHEUMER
D1	MWF	11	13	RHEUMER

Geol. 101. Physical Geology. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	204	KARPINSKI
LAB	1	TU	8/10	42	DEMAR
QUIZ	1	TH	8	42	DEMAR
LAB	2	TH	9/11	42	KURS
QUIZ	2	TU	10	42	KURS
LAB	3	M	10/12	42	KURS
QUIZ	3	W	10	42	KURS
LAB	4	F	10/12	42	DEMAR
QUIZ	4	W	11	42	DEMAR
LAB	5	W	12/2	42	KURS
QUIZ	5	M	1	42	KURS
LAB	6	F	12/2	42	KARPINSKI
QUIZ	6	M	12	42	KARPINSKI
LAB	7	M	2/4	42	KURS
QUIZ	7	W	2	42	KURS
LAB	8	F	2/4	42	DEMAR
QUIZ	8	W	3	42	DEMAR

Geol. 102. Historical Geology. Evolution of the earth and its life. Lectures and laboratory. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 142.

LEC	N	TT	10	65	DEMAR
LAB	11	TH	11/1	42	DEMAR
QUIZ	11	TU	12	42	DEMAR

Geol. 131. Mineralogy. A systematic study of minerals. The nature of minerals as crystalline materials, and their geologic relations are emphasized. Crystal models, crystals, and the common non-silicate minerals are studied in the laboratory. Lecture and laboratory. Credit 4 hours. Prerequisite: One semester of college chemistry.

A	MWF	8/10	42	KURS	

Geol. 150. Geology for Engineers. Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	G	MW	2	213	KARPINSKI
LAB	21	TU	3/5	42	KARPINSKI

German 101. Elementary Course. Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	220	KAUF
B1	TWTF	9	220	KAUF
B2	TWTF	9	219	VARDAMAN
C1	TWTF	10	220	VARDAMAN
D1	TWTF	11	220	BRAUNFELD
D2	TWTF	11	219	WILLNER
E1	TWTF	12	220	TEICHMANN
F1	TWTF	1	220	HARTOCH
F2	TWTF	1	219	BRAUNFELD
H1	TWTF	3	220	TEICHMANN
H2	TWTF	3	219	
J1	TWTF	4	220	

German 102. Elementary Course. Continuation of German 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

B1	TWTF	9	223	WILLNER
C1	TWTF	10	219	WILLNER
E1	TWTF	12	219	
F1	TWTF	1	223	

German 103. Intermediate Course. Modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite, German 102, two years of high school German, or equivalent.

B1	TWTF	9	221	BRAUNFELD
C1	TWTF	10	221	BRAUNFELD
D1	TWTF	11	221	TEICHMANN
E1	TWTF	12	221	HARTOCH
F1	TWTF	1	221	TEICHMANN
H1	TWTF	3	37	HARTOCH

German 104. Intermediate Course. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Credit 4 hours. Prerequisite: German 103, three years of high school German, or equivalent.

C1	TWTF	10	223	KAUF
E1	TWTF	12	223	KAUF

German 113. Practice in Conversation. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Credit 2 hours. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

R1	TT	1	214	WILLNER

HISTORY

Hist. 111. History of Western Civilization to 1815. Europe from the age of the great discoveries to the close of the Napoleonic wars. This course with History 112 meets the Social Science requirement in Liberal Arts and Sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

(Lecture and quiz sections in this course are coordinate. Quiz sections must be chosen from one of the groups listed directly beneath this particular lecture.)

LEC	B1	MW	9	213	NICHOLSON
QUIZ	E1	MW	12	97	NICHOLSON
QUIZ	F1	WF	1	16	GOODMAN
QUIZ	G1	WF	2	28	NICHOLSON
QUIZ	J1	MW	4	97	
QUIZ	N1	TT	10	20	GOODMAN
QUIZ	P1	TT	11	97	NICHOLSON
QUIZ	R1	TT	1	97	NICHOLSON
LEC	P1	TT	11	218	UNFER
QUIZ	A1	MW	8	14	UNFER
QUIZ	B1	MW	10	14	UNFER
QUIZ	M1	TT	9	23	UNFER
QUIZ	R2	TT	1	23	UNFER
QUIZ	T1	TT	3	23	UNFER

Hist. 131. History of England to 1714. A survey of the political and constitutional social and economic, church and cultural, and imperial history of the British people from the beginning of English history through 1714. This course with History 132 meets the humanities requirement in Liberal Arts and Sciences. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	213	BILL/GOODMAN
QUIZ	G1	MWF	2	37	
QUIZ	L1	TTF	8	37	GOODMAN
QUIZ	N1	TTF	10	37	BILL
QUIZ	P1	TTF	11	37	BILL
QUIZ	Q1	TTF	12	37	GOODMAN

Hist. 151. History of the United States to 1865. Colonial foundations, movement for independence, early years of the Republic. Credit 3 hours. Prerequisite: Sophomore standing.

LEC	C1	M	10	218	JONES
QUIZ	N1	TT	10	82	JONES
QUIZ	N2	TT	10	14	RIDDLE
QUIZ	R1	TT	1	22	JONES

Hist. 152. History of the United States from 1865 to the Present. A century of national life and organization. Credit 3 hours. Prerequisite: Sophomore standing.

	L1	MTT	8	82	JONES

Hist. 181. The Ancient World. Ancient empires and Greece. Credit 3 hours. Prerequisite: Sophomore standing.

	N1	MTT	10	97	NICHOLSON

HUMANITIES

Humanities 101. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities. Credit 4 hours.

A1	TWTF	8	215	RUNYAN
C1	TWTF	10	214	BLUM
D1	TWTF	11	215	RUNYAN
E1	TWTF	12	215	BLUM
H1	TWTF	3	223	JORDAN
J1	TWTF	4	223	JORDAN

Humanities 151. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. This course, plus Humanities 152, satisfies the general education requirement in the humanities. Credit 4 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	TWTF	9	215	SCHILLER
D1	TWTF	11	223	VARDAMAN
F1	TWTF	1	215	VARDAMAN

HYGIENE

Hygiene 104. Personal and Community Hygiene. This course covers basic principles of hygiene. Especially recommended for those going into teaching, occupational therapy, social work, etc. Credit: 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

A1	WF	8	229
F1	WF	1	229
G1	WF	2	229
L1	TT	8	229
M1	TT	9	229
N1	TT	10	229
P1	TT	11	229
Q1	TT	12	229
R1	TT	1	229

Hygiene 110. Public Health. Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P1	TT	11	20

MANAGEMENT

Management 101. Industrial Organization and Management. Organization plans, administrative policies, and management problems with special attention to manufacturing units. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	24	GILLETT
D1	MWF	11	23	GILLETT
F1	MWF	1	23	GILLETT

MARKETING

Marketing 101. Principles of Marketing. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Credit 3 hours. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

C1	MWF	10	22	KNUDSON
E1	MWF	12	19	KNUDSON
T1	MTT	3	22	KNUDSON

MATHEMATICS

Math. 102. Basic Mathematics. Continuation of Mathematics 101. Credit 3 hours. Prerequisite: Mathematics 101.

G1	MWF	2	96	LINN

Math. 103. Introduction to College Algebra. Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Credit 3 hours. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MWF	8	102	MORGENTHALER
A2	MWF	8	100	CURTIS
A3	MTWTF	8	103	VEDRAL
A4	MTWTF	8	111	NOLAN
A5	MTWTF	8	106	SJOBLOM
A6	MTWTF	8	113	FEINSTEIN
A7	MTWTF	8	104	SCHOLOMITI
B1	MWF	9	105	BERGLUND
B2	MTWTF	9	104	LUMLEY
B3	M	9	100	BALLARD
	TT	9	105	
B4	MTWTF	9	106	ZIOMEK
C1	MTWTF	10	105	BALLARD
C2	MTWTF	10	101	ZIOMEK
C3	MTWTF	10	111	SCHOLOMITI
C4	MTWTF	10	102	ZYGMUND
C5	MTWTF	10	104	LUMLEY
C6	MTWTF	10	106	NOLAN

C7	MTWTF	10	96	SEARS
C8	MWF	10	82	LINN
D1	MTWTF	11	102	VEDRAL
D2	MTWTF	11	103	ZYGMUND
D3	MTWTF	11	96	OLSEN
E1	MTWTF	12	111	LARIVIERE
E2	MTWTF	12	102	MURPHY
F1	MWF	1	96	DINKINES.
F2	MWF	1	106	OLSEN
F3	MWF	1	103	LINN
G1	MWF	2	101	DINKINES
G2	MWF	2	106	GORDON
H1	MTWTF	3	96	ALBERTI
H2	MTWTF	3	94	PENNISI
H3	MTWTF	3	103	HENDERLEITER
H4	MTWTF	3	106	MERTES
J1	MTWTF	4	96	REES
J2	MTWTF	4	111	MERTES
J3	MTWTF	4	100	LARIVIERE
J4	MTWTF	4	101	GORDON

Math. 108. Elementary Plane Geometry for Veterans. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. No credit.

F1	M	1	113	WILEY
	TT	1	111	

Math. 109. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Credit 4 hours. Prerequisite: Consent of the department.

F1	MTWTH	1	101	REES

Math.111. Algebra. Required for students in Architecture deficient in algebra. Other students admitted only by consent of their college office and the Mathematics Department. Students with 95 or more credit hours receive only 3 hours credit. Credit 5 hours. Prerequisite: Algebra, 1 unit; Plane Geometry, 1 unit.

B1	MTWTF	9	101	ONDRAK
E1	MTWTF	12	101	KUZMANIC
H1	MTWTF	3	101	HILL

Math. 112. College Algebra. Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

(*) Sections for Commerce students only.

*	A1	MWF	8	144	LUMLEY
*	A2	TT	8	110	ONDRAK
		F	8	105	
	B1	TWF	9	100	MURPHY
	B2	MWF	9	94	HARTLEY
	D1	TWF	11	100	HARTLEY
	D2	MWF	11	101	FRANK
	F1	MWF	1	105	ONDRAK
	F2	TT	1	102	HILL
		F	1	101	
	F3	MWF	1	104	SEARS
	F4	MWF	1	102	BERGLUND
	G1	MWF	2	100	PENNISI
	G2	MWF	2	111	FRANK
	G3	MWF	2	103	MERTES
*	G4	MWF	2	104	HENDERLEITER
	G5	MWF	2	94	WILEY
	G6	MWF	2	102	ALBERTI
	H1	MWF	3	104	WILEY
	J1	MWF	4	103	HILL

Math. 114. Plane Trigonometry. Identities, equations, addition formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	102	LUMLEY
M1	TT	9	96	OLSEN
M2	TT	9	94	HARTLEY
N1	TT	10	100	BERGLUND
P1	TT	11	101	KUZMANIC
P2	TT	11	111	BERGLUND
Q1	TT	12	100	SEARS
Q2	TT	12	96	ZYGMUND
Q3	TT	12	106	SCHOLOMITI
R1	TT	1	100	MERTES
R2	TT	1	105	HENDERLEITER
T1	TT	3	104	LARIVIERE
U1	TT	4	106	PENNISI
U2	TT	4	103	ALBERTI

Math. 123. Analytic Geometry. Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Credit 5 hours. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 112 and 114.

A1	MTWTF	8	96	ZIOMEK
B1	MTWTF	9	111	CURTIS
B2	MTWTF	9	103	NOLAN
B3	MTWTF	9	110	FEINSTEIN
D1	MTWTF	11	106	SJOBLOM
D2	MTWTF	11	105	SEARS
E1	MTWTF	12	103	OLSEN
E2	MTWTF	12	104	LINN
E3	MTWTF	12	94	BERGLUND
H1	MTWTF	3	102	REES
J1	MTWTF	4	102	HENDERLEITER
J2	MTWTF	4	104	WILEY

Math. 133. Calculus. First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Credit 3 hours. Prerequisite: Mathematics 123.

D1	MWF	11	111	DINKINES
E1	MWF	12	106	ONDRAK
F1	MWF	1	111	ZYGMUND
F2	MWF	1	100	FRANK
G1	MWF	2	105	HILL
H1	MWF	3	111	LARIVIERE
J1	MWF	4	106	ALBERTI

Math. 143. Calculus. Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expansion of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Credit 5 hours. Prerequisite: Mathematics 133.

A1	MTWTF	8	101	BALLARD
B1	MTWTF	9	102	VEDRAL
C1	MTWTF	10	103	CURTIS
D1	MTWTF	11	104	MURPHY
E1	MTWTF	12	105	SJOBLOM
H1	MTWTF	3	105	GORDON

Math. 343. Advanced Calculus: Credit 3 hours. Prerequisite: One year of calculus.

E1	MWF	12	100	HARTLEY
H1	MWF	3	100	DINKINES

Math. 345. Differential Equations and Orthogonal Functions. Credit 3 hours. Prerequisite: One year of calculus.

B1	MWF	9	96	MORGENTHALER
C1	MWF	10	100	FRANK
E1	MWF	12	96	FEINSTEIN
F1	MWF	1	94	SCHOLOMITI
J1	MWF	4	94	PENNISI

M. E. 182. Manufacturing Processes. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Credit 3 hours. Prerequisite: General Engineering 101, sophomore standing.

B1	MWF	9	65
G1	MWF	2	65

M. E. 183. Materials Casting. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Credit 3 hours. Prerequisite: General Engineering 101; sophomore standing.

LEC	D	MF	11	65
LAB	A	TU	8/11	71
LAB	B	W	11/2	71
LAB	C	W	2/5	71

M. E. 184. Metal Processing. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Credit 3 hours. Prerequisite: General Engineering 101; credit or registration in Integral Calculus and Physics 108.

LEC	P	TT	11	65
LAB	A	M	11/2	64
LAB	B	W	11/2	64
LAB	C	F	2/5	64

M. E. 209. Thermodynamics and Heat Transfer. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Credit 3 hours. Prerequisite: Physics 108; Mathematics 142 or 143.

C1	MWF	10	113

M. E. 221. Mechanics of Machinery. Linkages, cams, and gears; belts, ropes, and chains; velocities, accelerations, and inertia forces in machines; vibrations and critical speeds; balancing of engines; principle of the gyroscope. Credit 5 hours. Prerequisite: Registration in T.A.M. 156 or 211.

D1	MWF	11	146
D	TT	8/11	146

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. Freshman Basic Drill and Theory. Basic military instruction to include: Organization of the Army and ROTC; individual weapons and marksmanship, and leadership, drill and command. Credit 1 hour. Prerequisite: Military Science department approval.

THEORY	1	MW	9	230	CLAMPITT
THEORY	2	TT	9	230	CLAMPITT
THEORY	3	MW	10	230	CLAMPITT
THEORY	4	TT	10	230	CLAMPITT
THEORY	5	MW	11	230	CLAMPITT
THEORY	6	TT	11	230	CLAMPITT
DRILL	1	TU	8	AUD	JONES
DRILL	2	W	8	AUD	JONES
DRILL	3	TH	8	AUD	JONES

Mil. Sci. 103. Sophomore Basic Drill and Theory. Basic military instruction to include: Map and aerial photographs; elementary communications; and leadership, drill, and command. Credit 1 hour. Prerequisite: Military Science 102 or equivalent.

THEORY	2	TT	9	228	CHAMBERS
THEORY	3	MW	10	228	CHAMBERS
THEORY	4	TT	10	228	CHAMBERS
THEORY	5	MW	11	228	CHAMBERS
DRILL	1	TU	8	AUD	CRUMPACKER
DRILL	2	W	8	AUD	CRUMPACKER
DRILL	3	TH	8	AUD	CRUMPACKER

MUSIC

Music 100. Rudiments of Theory. Notation, scales, intervals, chords, terminology. Credit 2 hours.

D1	MWF	11	354	FISSINGER

Music 130. Introduction to the Art of Music, I. Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only. Credit 3 hours.

C1	MWF	10	354	FISSINGER

Music 150. Music Ensemble. Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit. Credit ½ hour.

A	TT	*2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
C	TT	***11	354	FISSINGER
	F	3/5	354	

* Band rehearsals often continue into the 3 o'clock hour; attendance at 3 o'clock is desired, but not required.

*** Students unable to attend all 4 hours may participate with consent of the Director. To earn credit, attendance at rehearsals at least 2 hours weekly is required.

PHARMACY

Pharm.100. Introductory Pharmacy. An orientation course covering the scope, historical development and literature of pharmacy. Credit 2 hours. For students in Pharmacy only.

LEC	T1	TT	3	218	TERRY

PHILOSOPHY

Phil. 101. Introduction to Philosophy. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form an approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

B1	M	9	37	PAGE
	WF	9	18	
B2	MWF	9	28	MORRIS
E1	MWF	12	82	MORRIS
T1	MTT	3	13	PAGE

Phil. 102. Logic. Reasoning, detection of fallacies, evidence. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	16	MORRIS
D1	MWF	11	28	PAGE
P1	TT	11	18	MORRIS
	F	11	19	
Q1	TT	12	19	PAGE
	F	12	18	

Phil. 105. Moral Ideas and Practice. Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

P1	TT	11	14	PAGE

PHYSICAL EDUCATION FOR MEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

* Special conditioning sections. ** Adaptive only.

P. E. M. 101, 102, 103, 104. Prescribed Exercises. Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively. Credit 1 hour.

C	MWF	10	GYM	NEMOTO
D	MWF	11	GYM	NEMOTO
E	MWF	12	GYM	MANN
F	MWF	1	GYM	NEMOTO

P. E. M. 106. Developmental Activities. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. Credit 1 hour.

* A	MWF	8	GYM	STRNAD
B	MWF	9	GYM	WILDNER
C	MWF	10	GYM	MILLER
D	MWF	11	GYM	WILDNER
E1	MWF	12	GYM	MAJER
E2	MWF	12	GYM	VERSEN
F	MWF	1	GYM	WILDNER
G	MWF	2	GYM	MAJER
* H	MWF	3	GYM	BERRAFATO

P. E. M. 107. Beginning Swimming. For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

MN	TT	9	LAWSON YMCA	SPRINGER

P. E. M. 109. Advanced Swimming. For swimmers (ability to swim at least 100 yards). Students must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

NP	TT	10	LAWSON YMCA	KRISTUFEK

P. E. M. 112. Individual Tumbling Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

B	MWF	9	GYM	MAJER
NP	TT	10	GYM	MAJER
D	MWF	11	GYM	MILLER
PQ	TT	11	GYM	WILDNER
F	MWF	1	GYM	FORDHAM

P. E. M. 113. Double Tumbling Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

G	MWF	2	GYM	SPRINGER

P. E. M. 114. Apparatus Stunts. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	MONTCALM
D	MWF	11	GYM	MONTCALM
QR	TT	12	GYM	MONTCALM
RS	TT	1	GYM	SPRINGER

P. E. M. 117. Boxing. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

B	MWF	9	GYM	STRNAD
E	MWF	12	GYM	WILDNER
QR	TT	12	GYM	MAJER
F	MWF	1	GYM	MILLER

P. E. M. 118. Wrestling. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	VERSEN
NP	TT	10	GYM	VERSEN
D	MWF	11	GYM	MAJER
PQ	TT	11	GYM	MANN
QR	TT	12	GYM	MANN
F	MWF	1	GYM	STRNAD
G	MWF	2	GYM	MANN

P. E. M. 120. Personal Defense Activities. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

E	MWF	12	GYM	RADER
RS	TT	1	GYM	KRISTUFEK
H	MWF	3	GYM	RADER

P.E.M. 122. Individual Athletics. Skills, knowledge, attitudes and conditions. Credit 1 hour.

E	MWF	12	GYM	SPRINGER

P. E. M. 123. Weight Lifting. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

A	MWF	8	GYM	VERSEN
LM	TT	8	GYM	NEMOTO
B	MWF	9	GYM	NEMOTO
MN	TT	9	GYM	WILDNER
C	MWF	10	GYM	STRNAD
D	MWF	11	GYM	KRISTUFEK
PQ	TT	11	GYM	BERRAFATO
F	MWF	1	GYM	RADER
G	MWF	2	GYM	GEDVILAS

P. E. M. 129. Volleyball. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

LM	TT	8	GYM	STRNAD
MN	TT	9	GYM	BERRAFATO
NP	TT	10	GYM	MANN
PQ	TT	11	GYM	VERSEN
QR	TT	12	GYM	WILDNER
RS	TT	1	GYM	FORDHAM
** G	MWF	2	GYM	BERRAFATO
** H	MWF	3	GYM	GEDVILAS

P. E. M. 130. Basketball. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

C	MWF	10	GYM	RADER
F	MWF	1	GYM	GEDVILAS

P. E. M. 132. Archery. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

PQ	TT	11	GYM	RADER

P. E. M. 136. Badminton. Skills, knowledge, attitudes, and conditions. Credit 1 hour.

LM	TT	8	GYM	VERSEN
MN	TT	9	GYM	NEMOTO
NP	TT	10	GYM	STRNAD
PQ	TT	11	GYM	MAJER
QR	TT	12	GYM	BERRAFATO
RS	TT	1	GYM	RADER

P. E. M. 139. Backyard Sports. Skills, knowledge, and conditions. Credit 1 hour.

**	A	MWF	8	GYM	NEMOTO
**	B	MWF	9	GYM	VERSEN
	MN	TT	9	GYM	STRNAD

P. E. M. 140. Boating and Fishing. Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

NP	TT	10	GYM	RADER
QR	TT	12	GYM	SPRINGER

P. E. M. 143. American Square Dance. Credit 1 hour.

C	MWF	10	AUD	THOMAS

P. E. M. 150. Professional Orientation. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. Credit 2 hours.

D	WF	11	82	FORDHAM

P. E. M. 153. Fitness Programs. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. Credit 2 hours.

(First 8 weeks.)

A	MTWTF	8/10	GYM	MONTCALM

P. E. M. 154. Swimming. Crawl, back, breast, and side strokes; diving; life saving. To be taken with Physical Education for Men 153. Credit 2 hours.

(Second 8 weeks.)

A1	MTWTF	8/10	LAWSON YMCA	SPRINGER
A2	MTWTF	8/10	LAWSON YMCA	KRISTUFEK

P. E. M. 155. Gymnastics and Wrestling. Tumbling, apparatus stunts, and wrestling skills. Credit 2 hours.

(Second 8 weeks.)

A	MTWTF	8/10	GYM	MONTCALM/MANN

P. E. M. 156. Track and Field and Baseball. Track events, field events, and baseball skills; rules. Credit 2 hours.

(First 8 weeks.)

A	MTWTF	8/10	GYM	FORDHAM/MILLER

P.E.M. 209. History of Sports. Development of sport and physical education in Europe and the United States since 1750. Credit 3 hours. For Physical Education majors only.

F	MWF	1	80	KRISTUFEK

RECREATION

Recreation 174. Camp Counseling. Objectives, administration, techniques, activity programs, evaluation. Credit 3 hours.

E	MWF	12	65	GEDVILAS

Recreation 176. Principles of Recreation. History of leisure and recreation; concepts of play and recreation; major recreation agencies. Credit 3 hours.

D	MWF	11	97	BERRAFATO

PHYSICAL EDUCATION FOR WOMEN

All TT classes meet for 1½ hours; students will be released early to participate in extra curricular activities.

P. E. W. 100. Conditioning Activities. Credit 1 hour.

MN	TT	9	AUD	CLAYPOOLE
PQ	TT	11	AUD	ANZALONE
E	MWF	12	AUD	PESAVENTO
RS	TT	1	AUD	THOMAS
H	MWF	3	AUD	THOMAS
TU	TT	3	AUD	THOMAS

P. E. W. 102. Modified Activities. Prescribed recreational sports, relaxation, and exercise. Credit 1 hour. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUD	ANZALONE

P. E. W. 105. Elementary Rhythms. Beginning dance techniques. Credit 1 hour.

B	MWF	9	AUD	CLAYPOOLE
D	MWF	11	AUD	CLAYPOOLE
PQ	TT	11	AUD	CLAYPOOLE
F	MWF	1	AUD	CLAYPOOLE
RS	TT	1	AUD	CLAYPOOLE

P. E. W. 106. Intermediate Rhythms. Intermediate dance techniques, solo and group dance compositions. Credit 1 hour. Prerequisite: Physical Education for Women 105 or consent of instructor.

NP	TT	10	AUD	CLAYPOOLE

P. E. W. 110. Elementary Swimming. Credit 1 hour.

(First 8 weeks.)

A	MTWTF	8	LAWSON YMCA	ANZALONE

P. E. W. 122. Speedball—Volleyball. Credit 1 hour.

C	MWF	10	AUD	ANZALONE

P. E. W. 123. Basketball. Credit 1 hour.

D	MWF	11	AUD	PESAVENTO
G	MWF	2	AUD	THOMAS

P. E. W. 124. Volleyball. Credit 1 hour.

F	MWF	1	AUD	THOMAS

P. E. W. 130. Badminton. Personal equipment to be furnished by student. Credit 1 hour.

QR	TT	12	AUD	ANZALONE

P. E. W. 140. Boating and Fishing. Open to students who have completed two semesters of physical education, or consent of instructor. Credit 1 hour.

PQ	TT	11	AUD	THOMAS

P. E. W. 141. Tumbling and Apparatus Stunts. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. Credit 1 hour.

RS	TT	1	AUD	ANZALONE

P. E. W. 143. American Square Dance. Credit 1 hour.

C	MWF	10	AUD	THOMAS

P. E. W. 144. Elementary Folk Dance. Credit 1 hour.

E	MWF	12	AUD	BARTON

P. E. W. 150. Professional Orientation. Credit 2 hours.

(Second 8 weeks.)

A	MTWTF	8	251	PESAVENTO

P. E. W. 151. Body Mechanics, Gymnastics and Hockey. Credit 2 hours. For Physical Education majors.

B	MTWTF	9	AUD	PESAVENTO

P. E. W. 153. Soccer, Speedball and Volleyball. Credit 1 hour. For Physical Education majors.

C	MTWTF	10	AUD	PESAVENTO

PHYSICAL SCIENCE

Phys. Sci. 101. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	M	TT	9	204	MELOY
LAB	1	TU	10/1	85	COWIN
QUIZ	1	TH	10	74	COWIN
LAB	2	W	8/11	85	FARAG
QUIZ	2	M	9	76	FARAG
LAB	3	W	11/2	85	MILLER
QUIZ	3	M	11	74	MILLER
LAB	4	TH	10/1	85	HEDBERG
QUIZ	4	TU	10	74	HEDBERG
LAB	5	W	2/5	85	COWIN
QUIZ	5	M	2	74	COWIN
LAB	6	F	8/11	85	FARAG
QUIZ	6	M	10	74	FARAG
LAB	7	F	11/2	85	MILLER
QUIZ	7	M	1	75	MILLER
LAB	8	F	2/5	85	COWIN
QUIZ	8	M	3	74	COWIN

Phys. Sci. 102. Introduction to the Physical Sciences. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101.

LEC	B	WF	9	204	MELOY
LAB	11	M	9/12	85	HEDBERG
QUIZ	11	TH	9	76	HEDBERG
LAB	12	M	1/4	85	MELOY
QUIZ	12	F	2	76	MELOY

PHYSICS

Physics 101. General Physics (Mechanics, Heat, Sound). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Trigonometry.

LEC	X	TU	11	127	
LEC	Y	TU	1	127	
QUIZ	B1	MWF	9	134	SILKETT
LAB	B	TU	8/11	117	SILKETT
QUIZ	D1	MWF	11	134	WILBUR
LAB	D	M	3/6	117	WILBUR
QUIZ	F1	MWF	1	134	LIVERMORE
LAB	F	TH	11/2	117	LIVERMORE
QUIZ	H1	MWF	3	134	LIVERMORE
LAB	H	TU	3/6	117	LIVERMORE

Physics 102. General Physics (Electricity, Magnetism, Light, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Credit 5 hours. Prerequisite: Physics 101.

LEC	X	TH	11	127	
QUIZ	D1	MWF	11	144	JOHNSON
LAB	D	TH	8/11	122	JOHNSON
QUIZ	F1	MWF	1	144	WILBUR
LAB	F	TU	3/6	122	WILBUR

Physics 106. General Physics (Mechanics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Credit or registration in Mathematics 133.

LEC	X	M	10	127	
LEC	Y	M	1	127	
QUIZ	A1	WF	8	134	MORAINE
LAB	A	TU	8/11	123	MORAINE
QUIZ	C1	WF	10	134	MORAINE
LAB	C	TH	8/11	123	MORAINE
QUIZ	E1	WF	12	144	SKADELAND
LAB	E	TH	11/2	123	SKADELAND
QUIZ	F1	WF	1	113	SILKETT
LAB	F	TH	3/6	123	SILKETT
QUIZ	H1	WF	3	144	SKADELAND
LAB	H	TU	3/6	123	SKADELAND
QUIZ	M1	TT	9	134	PAPPADEMOS
LAB	M	W	8/11	123	PAPPADEMOS
QUIZ	P1	TT	11	134	CHANDLER
LAB	P	F	8/11	123	CHANDLER
QUIZ	R1	TT	1	134	
LAB	R	W	12/3	123	
QUIZ	T1	TT	3	134	
LAB	T	F	3/6	123	

Physics 107. General Physics (Electricity, Magnetism, Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	W	10	127	
LEC	Y	W	1	127	
QUIZ	C1	MF	10	134	ANDERSON
LAB	C	TU	8/11	122	ANDERSON

QUIZ	E1	MF	12	110	RAILSBACK
LAB	E	TU	11/2	122	RAILSBACK
QUIZ	G1	MF	2	144	
LAB	G	M	3/6	122	
QUIZ	L1	TT	8	134	PAPPADEMOS
LAB	L	M	8/11	122	PAPPADEMOS
QUIZ	P1	TT	11	113	MCNEIL
LAB	P	M	12/3	122	MCNEIL
QUIZ	Q1	TT	12	144	PAPPADEMOS
LAB	Q	F	8/11	122	PAPPADEMOS
QUIZ	R1	TT	1	144	MINKLER
LAB	R	F	12/3	122	MINKLER

Physics 108. General Physics (Heat, Sound, Light). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Credit 4 hours. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	F	10	127	
LEC	Y	F	1	127	
QUIZ	B1	MW	9	144	MINKLER
LAB	B	TU	8/11	124	MINKLER
QUIZ	L1	TT	8	134	WEISSMAN
LAB	L	M	8/11	124	WEISSMAN
QUIZ	N1	TT	10	134	WEISSMAN
LAB	N	W	8/11	124	WEISSMAN
QUIZ	R1	TT	1	113	ANDERSON
LAB	R	M	12/3	124	ANDERSON
QUIZ	T1	TT	3	144	JOHNSON
LAB	T	M	3/6	124	JOHNSON

321. **Theoretical Mechanics.** Physics 321 and 322 are fundamental to many advanced courses and should be elected as early as possible by those intending to specialize in physics. Laws of motion, vectors, statics, energy and momentum principles for a particle and for systems of particles, motion of a particle under constant forces, plane motion of a rigid body, simple harmonic motion and resonance, impact. Lectures and problems. **Credit 4 hours. Prerequisite: General Physics and Calculus.**

D1	MWF	11		208	BESS

Physics 341. **Electricity and Magnetism.** Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Credit 4 hours. Prerequisite: General physics and calculus.

QUIZ	G1	MWF	2	208	CHANDLER
LAB	G	TH	3/6	208	CHANDLER

342. **Electricity and Magnetism.** Continuation of Physics 341. Boundary conditions and special methods in boundary value problems; interpretation of dielectric and magnetic properties of matter from the point of view of atomic and crystalline properties; use of complex notation in circuit problems; coupled circuits; nonlinear circuits; transmission lines; radiation from antennas; transmission and reflection of electromagnetic waves. **Credit 4 hours. Prerequisite: Physics 341.**

QUIZ	A1	MWF	8	208	MCNEIL
LAB	A	TU	8/11	208	MCNEIL

POLITICAL SCIENCE

Pol. Sci. 103. **Introduction to Political Science.** A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: Scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. Credit 3 hours.

A1	MWF	8	28	RAKOVE

Pol. Sci. 104. **Introduction to International Politics.** This is designed as a survey course. Topics to be covered will include the following: The development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. Credit 3 hours.

N1	MTT	10	28	BARBER

Pol. Sci. 150. **American Government: Organization and Powers.** Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. Credit 3 hours. Prerequisite: Sophomore standing.

D1	MW	11	37	RAKOVE
	F	11	16	
F1	MWF	1	37	RAKOVE

P1	TT	11	24	RAKOVE
	TH	12	24	
R1	MTT	1	82	BARBER
T1	MTT	3	28	BARBER
	TU	12	24	RAKOVE

Pol. Sci. 151. American Government: Functions. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Credit 3 hours. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

R1	TT	1	24	RAKOVE
	TU	12	24	

PSYCHOLOGY

Psych. 100. Introduction to Psychology. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Credit 4 hours. Prerequisite: Second semester freshman standing.

(Lecture and quiz sections in this course are coordinate. Quiz sections must be chosen from one of the groups listed directly beneath this particular lecture.)

LEC	B1	WF	9	218	HOWARD
QUIZ	C1	WF	10	17	HOWARD
QUIZ	E1	WF	12	22	HOWARD
QUIZ	M1	TT	9	37	HOWARD
QUIZ	N1	TT	10	22	HOWARD
QUIZ	P1	TT	11	22	V LIPMAN
QUIZ	Q1	TT	12	23	TYROLER
LEC	Q1	TT	12	218	E LIPMAN
QUIZ	E2	WF	12	28	V LIPMAN
QUIZ	F1	WF	1	28	V LIPMAN
QUIZ	H1	WF	3	28	V LIPMAN
QUIZ	R1	TT	1	13	V LIPMAN
QUIZ	T1	TT	3	14	V LIPMAN

Psych. 125. An Introduction to the Fields of Psychology. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Credit 4 hours. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

LEC	C1	WF	10	218	E LIPMAN
QUIZ	M1	TT	9	19	TYROLER
QUIZ	N1	TT	10	19	E LIPMAN
QUIZ	P1	TT	11	21	TYROLER

RHETORIC

Rhetoric 100. Freshman Remedial Rhetoric and Composition. Intensive review of fundamentals, with considerable practice in composition. Open to students who fail the placement test for admission to Rhetoric 101. Students passing this course will be admitted to Rhetoric 101 without further examination. No credit.

Admission to sections marked (*) requires consent of the Division of Humanities.

A1	MWF	8	201	KENNY
B1	MWF	9	201	KENNY
C1	MWF	10	201	KENNY
D1	MWF	11	94	WILLETT
E1	MWF	12	209	KENNY
E2	MWF	12	203	
E3	MWF	12	202	
*E4	MTWTF	12	228	KIRSTEIN/HOSKINS
F1	MWF	1	202	F JOHNSON
F2	M	1	222	HEGIE
	WF	1	216	
*F3	MTWTF	1	228	KIRSTEIN/HOSKINS
G1	MWF	2	221	HEGIE
G2	MWF	2	209	
H1	MWF	3	227	
*H2	MTWTF	3	228	KIRSTEIN/HOSKINS
J1	MWF	4	211	
J2	MWF	4	201	

L1	M	8	226	
	TT	8	203	
M1	M	9	224	
	TT	9	205	
M2	M	9	223	
	TT	9	203	
N1	M	10	223	
	TT	10	202	
N2	M	10	226	CARLSON
	TT	10	206	
P1	MTT	11	202	CARLSON
P2	M	11	226	FRIEND
	TT	11	94	FRIEND
Q1	M	12	222	NICHOLAS
	TT	12	205	
Q2	M	12	224	
	TT	12	116	
R1	MTT	1	203	TIMMIS
R2	MTT	1	209	S MILLER
T1	MTT	3	201	TIMMIS
T2	M	3	229	
	TT	3	209	

Rhetoric 101. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

A1	MWF	8	203	COX
B1	MWF	9	203	COX
B2	MWF	9	214	RUDIN
B3	MWF	9	209	ATWOOD
B4	M	9	226	I MILLER
	WF	9	211	
C1	MWF	10	229	I MILLER
C2	MWF	10	209	HEGIE
C3	MWF	10	202	ATWOOD
C4	MWF	10	116	FREYER
C5	MWF	10	206	RUDIN
D1	M	11	227	HIPPLE
	WF	11	202	
D2	M	11	223	HEGIE
	WF	11	211	
D3	MWF	11	116	J JOHNSON
D4	MWF	11	206	
D5	MWF	11	229	STRONKS
E1	MWF	12	75	RUDIN
E2	MWF	12	206	KERWICK
E3	M	12	28	ATWOOD
	WF	12	76	
E4	MWF		211	CASSELL
F1	M	1	221	FREYER
	WF	1	211	

F2	MWF	1	116	J JOHNSON
F3	MWF	1	214	I MILLER
F4	M	1	223	HIPPLE
	WF	1	203	
F5	MWF	1	229	KERWICK
F6	MWF	1	201	COX
G1	MWF	2	224	
G2	MWF	2	203	
G3	MWF	2	206	SIDNEY
G4	MWF	2	223	HIPPLE
G5	MWF	2	116	J JOHNSON
G6	MWF	2	222	CASSELL
G7	MWF	2	229	STAR
G8	MWF	2	211	F JOHNSON
H1	MWF	3	202	STAR
H2	MWF	3	203	SIDNEY
H3	M	3	226	CASSELL
	WF	3	201	
H4	MWF	3	209	
H5	MWF	3	211	STRONKS
H6	MWF	3	206	
J1	MWF	4	209	SIDNEY
J2	MWF	4	203	
L1	MTT	8	205	GRIEST
L2	MTT	8	206	LEONHARD
L3	MTT	8	209	
L4	MTT	8	202	MCNAMARA
L5	MTT	8	223	FRIEND

M1	MTT	9	206	GRIEST
M2	M	9	227	S MILLER
	TT	9	211	
M3	M	9	205	LOVE
	TT	9	116	
M4	M	9	222	FRIEND
	TT	9	202	
M5	TT	9	209	RUNYAN
	F	9	205	
N1	MTT	10	203	LEONHARD
N2	M	10	222	KARANIKAS
	TT	10	205	
N3	M	10	221	TIMMIS
	TT	10	211	
N4	MTT	10	94	S MILLER
N5	TT	10	201	SCHILLER
	F	10	203	
P1	M	11	224	MUNRO
	TT	11	203	
P2	MTT	11	205	JACKMAN
P3	M	11	209	TIMMIS
	TT	11	206	
P4	M	11	100	NICHOLAS
	TT	11	116	
P5	TTF	11	209	JORDAN
P6	TT	11	229	BLUM
	F	11	222	

Q1	M	12	226	LEONHARD
	TT	12	202	
Q2	MTT	12	201	GALLAGHER
Q3	M	12	225	KARANIKAS
	TT	12	211	
Q4	M	12	214	FRIEND
	TT	12	97	
Q5	TTF	12	229	RUNYAN
R1	M	1	226	
	TT	1	202	
R2	M	1	227	
	TT	1	116	
R3	MTT	1	206	
R4	MTT	1	211	KARANIKAS
R5	M	1	224	GRIEST
	TT	1	229	
R6	M	1	220	
	TT	1	94	
R7	TT	1	201	JORDAN
	F	1	206	
R8	TT	1	106	SCHILLER
	F	1	205	
T1	TTF	3	229	BLUM
T2	M	3	223	GALLAGHER
	TT	3	205	
T3	M	3	221	MUNRO
	TT	3	202	
U1	MTT	4	202	GALLAGHER
U2	MTT	4	215	

Rhetoric 102. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written English. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	211	WRIGHT
A2	MWF	8	229	DAVIS
B1	MWF	9	202	WRIGHT
B2	M	9	225	WEISS
	WF	9	206	
B3	MWF	9	229	VEST
C1	MWF	10	211	DAVIS
D1	MWF	11	203	WEISS
D2	MWF	11	201	SIDNEY
E1	MWF	12	116	STAR
E2	M	12	229	
	WF	12	201	
F1	M	1	225	DAVIS
	WF	1	209	
F2	M	1	28	WILLETT
	WF	1	82	
G1	MWF	2	202	WILLETT
G2	MWF	2	226	
H1	MWF	3	224	
J1	MWF	4	226	STAR
J2	MWF	4	205	
J3	MWF	4	225	KERWICK
L1	MTT	8	116	LOVE
L2	MTT	8	227	MACKIN
M1	M	9	221	MACKIN
	TT	9	201	

M2	M	9	211	MCNAMARA
	TT	9	229	
N1	M	10	227	KOGAN
	TT	10	209	
N2	M	10	224	MCNAMARA
	TT	10	229	
P1	M	11	221	
	TT	11	201	
P2	MTT	11	211	KOGAN
Q1	M	12	221	KOGAN
	TT	12	209	
Q2	M	12	223	MACKIN
	TT	12	203	
R1	MTT	1	205	CARLSON
T1	M	3	222	CARLSON
	TT	3	203	

Rhetoric 133. Principles of Composition. Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit 3 hours. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

G1	MWF	2	201	FREYER

Rhetoric 143. Intermediate Expository Writing. Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit 3 hours. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

G1	MWF	2	219	RUDIN

Rhetoric 151. Business Letter Writing. Credit 3 hours. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

C1	MWF	10	205	OLEKSY
E1	MWF	12	205	OLEKSY
G1	MWF	2	205	OLEKSY
H1	MWF	3	205	OLEKSY
N1	M	10	225	MUNRO
	TT	10	116	
Q1	M	12	227	MUNRO
	TT	12	206	

Soc. Sci. 111. The Individual in Society. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	MW	2	218	BOLTON
QUIZ	H1	MW	3	14	BOLTON
QUIZ	L1	TT	8	24	BOLTON
QUIZ	M1	TT	9	24	BOLTON
QUIZ	P1	TT	11	23	BOLTON

Soc. Sci. 112. Bases of American Life. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit 4 hours. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	218	BILL
QUIZ	G1	MWF	2	82	BILL
QUIZ	M1	MTT	9	82	RIDDLE
QUIZ	P1	MTT	11	82	JONES

Soc. Sci. 113. World Patterns and World Problems. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	M	9	218	COLBY
QUIZ	G1	MWF	2	14	CUTSHALL
QUIZ	M1	TTF	9	14	COLBY
QUIZ	Q1	MTT	12	14	COLBY

Soc. Sci. 116. Family Living. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Credit 4 hours. Prerequisite: Sophomore standing or consent of instructor.

LEC	D1	WF	11	218	STAFF
QUIZ	B1	WF	9	97	KLASSEN
QUIZ	P1	TT	11	28	E LIPMAN

SOCIOLOGY

Sociol. 100. Introduction to Sociology. Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	23	CORLEY
G1	MWF	2	97	KLASSEN
H1	MWF	3	97	KLASSEN
P1	TT	11	38	CORLEY
	TH	12	38	

Sociol. 130. Society and Individual Development. Nature of person and relation to institutions, social order, and development. Credit 3 hours. Prerequisite: Sociology 100.

C1	MW	10	37	CORLEY
	F	10	18	

Sociol. 276. Sociology of the City. Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Credit 3 hours. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	251	KLASSEN
E2	MWF	12	213	CORLEY

SPANISH

Spanish 101. Elementary Spanish. For students who have no credit in Spanish. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

A1	TWTF	8	225	TORT
C1	TWTF	10	227	MARSH
D1	TWTF	11	227	TORT
F1	TWTF	1	225	
H1	TWTF	3	225	

Spanish 102. Elementary Spanish. Continuation of Spanish 101. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

B1	TWTF	9	225	TORT
E1	TWTF	12	214	TORT

Spanish 103. Intermediate Spanish. Rapid reading, review of grammar, composition, conversation. Credit 4 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

B1	TWTF	9	227	MARSH
E1	TWTF	12	225	SANCHEZ
F1	TWTF	1	227	MARSH

Spanish 104. Intermediate Spanish. Continuation of Spanish 103. Credit 4 hours. Prerequisite: Spanish 103 or three years of high school Spanish.

C1	TWTF	10	225	SANCHEZ
E1	TWTF	12	227	MARSH

Spanish 113. Elementary Composition and Conversation. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Credit 2 hours. Prerequisite: Spanish 102 or two years of high school Spanish.

P1	TT	11	225	SANCHEZ

Spanish 201. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. Credit 3 hours. Prerequisite: Spanish 104 or four years of high school Spanish.

D1	MWF	11	225	SANCHEZ

SPEECH

Group Remedial Speech. Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Service, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor. No credit.

P1	TT	11	300	RIGLER

Speech 101. Principles of Effective Speaking. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

B1	MWF	9	217	KUNDRAT
C1	MWF	10	216	HOSKINS
D1	MWF	11	217	THOMPSON
E1	MWF	12	217	PITT
E2	MWF	12	216	CREWS
F1	MWF	1	217	KUNDRAT
G1	MWF	2	216	CREWS
G2	MWF	2	217	PITT
H1	MWF	3	217	PITT
H2	MWF	3	216	CREWS
J1	MWF	4	217	PITT

L1	MTT	8	217	ARMOLD
M1	M	9	215	ARMOLD
	TT	9	217	
N1	M	10	214	HOVDE
	TT	10	216	
P1	M	11	215	GOULSON
	TT	11	216	
P2	MTT	11	222	HOVDE
Q1	M	12	215	ARMOLD
	TT	12	217	
R1	M	1	215	HOVDE
	TT	1	217	
T1	M	3	225	HOVDE
	TT	3	217	
U1	MTT	4	217	CREWS

Speech 105. Voice and Articulation. A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

B1	MWF	9	216	HOSKINS
D1	MWF	11	216	KUNDRAT

Speech 107. Parliamentary Procedure. Principles and practice of parliamentary procedure. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	216	HOVDE

Speech 111. Business and Professional Speaking. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

P1	TT	11	217	PITT

Speech 117. Argumentation. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. Credit 3 hours. Prerequisite: Speech 101; sophomore standing.

C1	MWF	10	217	THOMPSON

Speech 141. Oral Interpretation of Literature. Principles of interpretation, analysis, and oral reading of prose literature and verse. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

M1	TT	9	217	ARMOLD
Q1	TT	12	216	GOULSON
T1	TT	3	216	CREWS

Speech 161. Fundamentals of Acting. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Credit 3 hours. Prerequisite: Speech 141.

R1	MTT	1	216	GOULSON

THEORETICAL AND APPLIED MECHANICS

T.A.M. 150. Analytical Mechanics (Statics). Resultants of force systems; distributed forces, center of gravity and centroids; equilibrium of coplanar and non-coplanar forces; internal forces in trusses and frames; friction; virtual work. Credit 2 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

Q1	TT	12	113

T.A.M. 151. Analytical Mechanics (Statics). Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams. virtual work, forces due to friction centroid. Credit 3 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

D1	MWF	11	113
H1	MWF	3	110

T.A.M. 154. Analytical Mechanics (Statics and Dynamics). A combination of T.A.M. 150 and 211 with less emphasis on some topics. Credit 4 hours. Prerequisite: registration in Mathematics 143.

C1	MWTF	10	110
H1	MTWF	3	113

T.A.M. 156. Analytical Mechanics (Statics and Dynamics). A combination of T.A.M. 150 and 211. Credit 5 hours. Prerequisite: Physics 101 or 106; registration in Mathematics 143.

E1	MTWTF	12	110

T. A. M. 171. Elements of Mechanics (Statics). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Credit 3 hours. Prerequisite: Mathematics 123.

G1	MWF	2	110

T. A. M. 172. Strength of Materials. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 171.

G1	MWF	2	134

T. A. M. 211. Analytical Mechanics (Dynamics). Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

F1	MWF	1	110
N1	MTT	10	144

T. A. M. 221. Elementary Mechanics of Deformable Bodies. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Credit 3 hours. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

A1	MWF	8	110
D1	MWF	11	110

T. A. M. 223. Mechanical Behavior of Solids. Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Credit 1 hour. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	TU	9/11	61
B	TH	12/2	61
C	M	2/4	61
D	W	12/2	61

224. Behavior of Materials. Introduction to atomic and molecular structure of metals, cement, concrete, plastics, ceramics, and glass; response of these materials to rapid, steady, and repeated loads at various temperatures (and environments) in terms of rheological models; fracture behavior of specific materials, i.e., stress rupture, brittle fracture, and fatigue of metals and concrete. Credit 3 hours. Prerequisite: T.A.M. 221.

E1	MWF	12	63

STUDENT'S COPY OF REGISTRATION

I. D. Number_____ College_____

NAME: _____

SUBJECT	Course No.	Cr. Hrs.	Section

	TIME	MON. Course	MON. Rm.	TUES. Course	TUES. Rm.	WED. Course	WED. Rm.	THURS. Course	THURS. Rm.	FRI. Course	FRI. Rm.
	8										
	9										
	10										
	11										
	12										
	1										
	2										
	3										
	4										
	5										

RETAIN THIS FORM

It is the only copy of your registration. Carry this copy with you always; present it to the department if any changes are made after registration.

20M—3-57—62559

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pt. 2

TIME TABLE

SECOND SEMESTER

1959-1960

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
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UNIVERSITY OF ILLINOIS

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1959/60
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TABLE OF CONTENTS

Pre-Registration Advisement Schedule..... 2
Registration Schedule, Second Semester..... 3
Instructions for Registration..... 4
Schedule of Tuition and Fees..... 6
Calendar, Second Semester, 1959-1960..... 7
Chicago Undergraduate Division Calendar, 1960..... 8
Urbana Calendar, 1960..... 9
Final Examinations Schedule..... 10
How to Read This Timetable..... 11
Accountancy..... 12
Anthropology..... 13
Architecture..... 13
Art..... 15
Biological Sciences..... 16
Business Law..... 20
Chemistry..... 20
Civil Engineering..... 25
Economics..... 26
Education..... 28
Electrical Engineering..... 29
English..... 29
French..... 31
General Engineering..... 32
Geography..... 34
Geology..... 35
German..... 36
History..... 37
Humanities..... 38
Hygiene..... 39
Management..... 39
Marketing..... 39
Mathematics..... 40
Mechanical Engineering..... 44
Military Sciences and Tactics..... 45
Music..... 46
Pharmacy..... 46
Philosophy..... 46
Physical Education for Men..... 47
Physical Education for Women..... 51
Physical Sciences..... 53
Physics..... 54
Political Science..... 57
Psychology..... 58
Rhetoric..... 59
Social Sciences..... 65
Sociology..... 66
Spanish..... 66
Speech..... 67
Theoretical and Applied Mechanics..... 68

PRE-REGISTRATION ADVISEMENT SCHEDULE
SECOND SEMESTER 1959-60

PLACE: Men's Gymnasium.

COMMERCE AND ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, February 1	1 p.m. - 4 p.m.
F - K	Tuesday, February 2	9 a.m. - 12 noon
L - Q	Tuesday, February 2	1 p.m. - 4 p.m.
R - Z	Wednesday, February 3	9 a.m. - 12 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS

A - E	Monday, February 1	1 p.m. - 4 p.m.
F - K	Tuesday, February 2	9 a.m. - 12 noon
L - Q	Tuesday, February 2	1 p.m. - 4 p.m.
R - Z	Wednesday, February 3	9 a.m. - 12 noon

NEW STUDENTS (Liberal Arts and Sciences only)
Wednesday, February 3

A - E..... 1 p.m.	I - N..... 3 p.m.
F - H..... 2 p.m.	O - Z..... 4 p.m.

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

REGISTRATION SCHEDULE
Second Semester, Spring, 1959-60

PLACE: Men's Gymnasium

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, February 5, 1960, will be assessed a late registration fee of $5.00.

A - B	Thursday, February 4	1:00 p.m.
C - D	Thursday, February 4	8:30 a.m.
E - G	Thursday, February 4	3:00 p.m.
H - K	Thursday, February 4	2:00 p.m.
L - M	Thursday, February 4	10:30 a.m.
S	Thursday, February 4	11:30 a.m.
T - Z	Thursday, February 4	9:30 a.m.
N - R	Friday, February 5	8:30 a.m.

NEW STUDENTS

A - D	Friday, February 5	11:30 a.m.
E - K	Friday, February 5	1:00 p.m.
L - R	Friday, February 5	10:30 a.m.
S - Z	Friday, February 5	9:30 a.m.

Students registering for less than 12 semester hours will register at 2:00 p.m., Friday, February 5.

All University offices will be closed on Saturday, February 6, 1960.

Late Registration will begin on Monday, February 8, 1960.

Instruction will begin on Monday, February 8, 1960.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

   No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
   SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

   No. 2 DEAN'S PROGRAM CARD

4. After the No. 2 card has been made out by your adviser and he has signed it, write your address and telephone number on the front of the No. 2 Dean's Program Card. Turn card over and complete the back in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in the box provided (further indicated by arrows) but do not write your name on these cards.

   No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and left margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with the program on the No. 2 Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2 and then proceed to Station No. 3 for class card check.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

11. Submit all cards to the fee card clerks at Station 4 and obtain a No. 6 Fee Assessment Card and a No. 7 Identification Card. Write your name and address on the No. 7 Identification Card.

12. All veterans stop at Station 5.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 4, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to a clerk at Station 7. Your cards should be presented in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in Military Science, report to Station 8.

16. You are now ready to pay your fees. Present your banded group of cards No. 1, 2, 3, and 5 cards, and No. 6, 7, and 4, (if applicable) to one of the cashiers. The banded group, No. 7 Identification Card, and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to a clerk at Station 12. The clerk at the station will return to you your Identification Card. This No. 7 Identification Card is very necessary and must be presented in order to participate in many University functions.

18. From this station proceed to the various stations for your insurance policy, University locker, and other University activities.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more.....$ 75.00
(Eight hours or less pay tuition at rate of $6.00 a semester hour).

Non-residents of Illinois taking nine hours or more.....$250.00
(Eight hours or less pay tuition at rate of $20.00 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours.....$ 8.00
(Less than five hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours.....$ 10.00
(Less than nine hours $5.00 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours.....$ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DAY OF REGISTRATION

GENERAL DEPOSIT:

All new students, and all former students who were not in attendance at the Chicago Undergraduate Division the first semester 1959-60, must pay the General Deposit (regardless of the number of hours they carry).

General Deposit.....$ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed beginning the first day of late registration, Monday, February 8, 1960.

Late registration fee.....$ 5.00

CHICAGO UNDERGRADUATE DIVISION
CALENDAR

Second Semester, Spring, 1960

Fri., Jan. 29 - Wed., Feb. 3	Orientation Period
Thurs., Feb. 4 - Fri., Feb. 5	Registration (Students registering for less than 12 hours report at 2:00 p.m., Friday, Feb. 5, for registration.)
Mon., Feb. 8	Instruction Begins
Tues., Feb. 9, 9:30 a.m.	Changes to adjust conflicts in program.
Thurs., Feb. 11, 1:00 p.m.	Earliest time at which program changes may be made for personal convenience.
Fri., Feb. 19, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Wed., Mar. 2	University Day (University opened 1868-not a holiday)
Fri., Apr. 1, 12:00 noon	Mid-semester grades are due.
Fri., Apr. 1, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Thurs., Apr. 14, 6:00 p.m.	Easter Vacation Begins.
Wed., Apr. 20, 8:00 a.m.	Easter Vacation Ends.
Thurs., May 5, 4:00 p.m.	Students withdrawing on or after this date must petition for re-admission.
Fri., May 6, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for Military withdrawals.
Fri., May 13	Honors Day
Thurs., May 26 - Fri., Jun. 3	Semester Examinations
Mon., May 30	Memorial Day (Holiday)

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

CALENDAR 1960

Second Semester (Spring 1960)

Jan. 29, Fri. - Feb. 3, Wed.	Orientation Period
Feb. 4, Thurs. - Feb. 5, Fri.	Registration
Feb. 8, Mon.	Instruction begins
Mar. 2, Wed.	University Day (University opened, 1868--Not a holiday)
Apr. 14, Thurs., 6:00 p.m.	Easter vacation begins
Apr. 20, Wed., 8:00 a.m.	Easter vacation ends
May 13, Fri.	Honors Day
May 30, Mon.	Memorial Day (Holiday)
May 26, Thurs. - Jun. 3, Fri.	Semester Examinations

Summer Session 1960

Jun. 17, Fri.	Registration
Jun. 20, Mon.	Instruction begins
Jul. 4, Mon.	Independence Day (Holiday)
Aug. 12, Fri.	Summer Session Examinations

First Semester (Fall 1960)

Sept. 6, Tues. - Sept. 14, Wed.	Orientation Period
Sept. 15, Thurs. - Sept. 16, Fri.	Registration
Sept. 19, Mon.	Instruction begins
Nov. 23, Wed., 6 p.m.	Thanksgiving Vacation begins
Nov. 28, Mon., 8 a.m.	Thanksgiving Vacation ends
Dec. 3, Sat.	Illinois Day (State admitted to Union, 1818 - not a holiday)
Dec. 16, Fri., 6 p.m.	Christmas Vacation begins
Jan. 2, Mon., 8 a.m.	Christmas Vacation ends
Jan. 13, Fri. - Jan. 20, Fri.	Semester Examinations

UNIVERSITY OF ILLINOIS
URBANA

CALENDAR 1960

Second Semester (Spring 1960)

Feb. 2, Tues. - Feb. 5, Fri.	Entrance Examinations
Feb. 8, Mon. - Feb. 10, Wed.	Registration
Feb. 11, Thurs.	Instruction begins
Mar. 2, Wed.	University Day (University opened, 1868)
Apr. 12, Tues., 1:00 p.m.	Spring vacation begins
Apr. 18, Mon., 1:00 p.m.	Spring vacation ends
Apr. 29, Fri.	Honors Day (Classes dismissed at noon)
May 30, Mon.	Memorial Day (Holiday)
May 30, Mon.	Study Day (Classes dismissed)
May 31, Tues. - Jun. 8, Wed.	Semester Examinations
Jun. 18, Sat.	Commencement exercises

Summer Session 1960

Jun. 7, Tues. - Jun. 10, Fri.	Entrance Examinations
Jun. 20, Mon.	Registration
Jun. 21, Tues.	Instruction begins
Jul. 4, Mon.	Independence Day (Holiday)
Aug. 12, Fri. - Aug. 13, Sat.	Summer Session Examinations

First Semester (Fall 1960)

Sept. 6, Tues. - Sept. 9, Fri.	Entrance Examinations
Sept. 12, Mon. - Sept. 17, Sat.	Freshman Week and Registration
Sept. 19, Mon.	Instruction begins
Sept. 19, Mon., 7-10 p.m.	Qualifying Examinations in English (for transfer students with 80 or more credit hours only)
Nov. 11, Fri.	Veterans Day (classes dismissed 10:45 to 11:15 a.m.)
Nov. 22, Tues., 5 p.m.	Thanksgiving Vacation begins
Nov. 28, Mon., 8 a.m.	Thanksgiving Vacation ends
Dec. 1, Thurs., 7-10 p.m.	Qualifying Examinations in English
Dec. 3, Sat.	Illinois Day (State admitted to the Union, 1818)
Dec. 8, Thurs., 7-10 p.m.	Qualifying Examinations in English
Dec. 17, Sat., 1 p.m.	Christmas Vacation begins
Jan. 3, Tues., 8 a.m.	Christmas Vacation ends
Jan. 19, Thurs.	Study Day, classes dismissed
Jan. 20, Fri. - Jan. 28, Sat.	Semester Examinations

FINAL EXAMINATIONS SCHEDULE, II 1959-60
May 26 through June 3, 1960

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes Meeting at	Classes having at least ONE session on Wednesday will be examined at: 9 a.m. to 11 a.m.	Classes having NO session on Wednesday will be examined at: 12 noon to 2 p.m.	All classes meeting at 8, 2, or 4 will be examined at: 3 p.m. to 5 p.m.
8 a.m.	_____	_____	Wednesday, June 1
9 a.m.	Thursday, May 26	Thursday, May 26	_____
10 a.m.	Friday, May 27	Friday, May 27	_____
11 a.m.	Tuesday, May 31	Tuesday, May 31	_____
12 noon	Wednesday, June 1	Wednesday, June 1	_____
1 p.m.	Thursday, June 2	Thursday, June 2	_____
2 p.m.	_____	_____	Thursday, June 2
3 p.m.	Friday, June 3	Friday, June 3	_____
4 p.m.	_____	_____	Friday, June 3

Combined Section examinations from 3 p.m. to 5 p.m. on:

Thursday, May 26

Friday, May 27

Tuesday, May 31

HOW TO READ THIS TIMETABLE

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 2). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

LEGEND FOR SECTION LETTERS*

Hour	MWF, MTWTF, TWTF	TT, MTT, TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

The information contained in the various columns under each course description is:

Column 1: Type of section--lecture, laboratory, quiz. (This column will not appear in all instances.)

Column 2: Section number. (See Legend above.)

Column 3: Day(s) of the week on which the section meets.

Column 4: Hour(s) of the day at which the section meets.

Column 5: Room(s) in which the section meets.

Column 6: Instructor(s) of the section.

ACCOUNTANCY

Accy. 101. Principles of Accounting. Credit 3 hours. Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	23	ANDREWS
C1	MWF	10	23	ANDREWS
E1	MWF	12	22	SCHNEIDER
F1	MWF	1	22	SCHNEIDER
G1	MWF	2	23	KABBES
H1	MWF	3	21	SCHNEIDER
M1	MTT	9	38	KABBES
P1	MTT	11	21	KABBES
R1	MTT	1	16	OSSMAN
R2	MTT	1	20	HEDISH
T1	MTT	3	23	OSSMAN

Accy. 105. Accounting Procedure. Credit 3 hours. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

B1	MWF	9	16	OSSMAN
C1	MWF	10	16	OSSMAN
C2	MWF	10	18	MALINOSKY
D1	MWF	11	18	MALINOSKY
E1	MWF	12	19	LIPKIN
F1	MWF	1	21	ANDREWS
G1	MWF	2	19	LIPKIN
G2	MWF	2	21	ANDREWS
H1	MWF	3	18	MALINOSKY
Q1	MTT	12	20	HEDISH
T1	MTT	3	19	HEDISH
U1	MTT	4	19	HEDISH

Accy. 106. Elementary Cost Accounting. Credit 3 hours. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	22	LIPKIN
D1	MWF	11	19	LIPKIN
G1	MWF	2	24	FOX
H1	MWF	3	24	FOX

Accy. 108. Intermediate Accounting. Credit 3 hours. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Prerequisite: One year of accountancy; sophomore standing.

C1	MWF	10	24	SCHNEIDER
E1	MWF	12	21	KABBES
G1	MWF	2	18	MALINOSKY

ANTHROPOLOGY

Anthrop. 103. Introduction to Anthropology: The Growth of Culture. Credit 4 hours. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology.

Q1	TWTF	12	28	WARREN
T1	TWTF	3	14	WARREN

ARCHITECTURE

Arch. 101. Introduction to Architecture. Credit 3 hours. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107.

LEC	D	W	11	251	WALLEY
LAB	A	MTTF	8/10	241	WALLEY
LAB	B	MTTF	10/12	241	WALLEY
LAB	C	MTTF	12/2	241	WHITE
LAB	D	MTTF	3/5	241	MASTERTON
LAB	E	MTTF	12/2	242	DEFILIPPS

Arch. 113. History of Ancient Architecture. Credit 2 hours. A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Prerequisite: Architecture 131 or sophomore standing.

LEC	D	MF	11	251	RADICE

Arch. 131. Architectural Deesign. Credit 3 hours. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Sophomore standing, Arch. 101, credit or registration in G.E. 108, and registration in Arch. 141.

LEC	G	W	2	251	COLBURN/RATHBUN
LAB	A	TT	8/11	242	RATHBUN
		W	9/11	242	RATHBUN
LAB	B	MF	2/5	242	COLBURN
		W	3/5	241	COLBURN

Arch. 132. Architectural Design. Credit 3 hours. Continued study of the fundamentals of architectural design. Prerequisite: Architecture 131.

LEC	F	W	1	251	DEFILIPPS
LAB	A	MF	8/11	242	DEFILIPPS
		W	9/11	242	DEFILIPPS
LAB	B	W	3/5	242	RATHBUN
		TT	3/6	242	RATHBUN

Arch. 141. Materials and Methods of Construction I. Credit 2 hours. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials: Prerequisite: Registration in Architecture 131.

LEC	R	TT	1	251	MIKOLAJCZYK

Arch. 142. Materials and Methods of Construction II. Credit 2 hours. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Prerequisite: Architecture 141.

LEC	F	MF	1	251	MIKOLAJCZYK

Arch. 214. History of Medieval Architecture. Credit 3 hours. A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Prerequisite: Architecture 113 or consent of instructor.

LEC	A	MWF	9	251	RADICE

Arch. 233. Architectural Design. Credit 3 hours. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Architecture 132, credit or registration in T.A.M. 150 or 171, and registration in Arch. **241.**

LAB	A	MWF	3/6	242	WHITE

Arch. 241. Materials and Methods of Construction III. Credit 2 hours. Semi-fireproof construction, manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Prerequisite: Architecture 142 and registration in Arch. **233.**

LEC	P	TT	12	251	MIKOLAJCZYK

Art 112. Introduction to Renaissance and Modern Art. Credit 3 hours. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period.

LEC	C	MWF	3	251	RADICE

Art 115. Art Appreciation. Credit 3 hours. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students.

LEC	H	MWF	4	251	MCNEE

Art 117. Drawing I. Credit 3 hours. Theory and practice in the elements of drawing.

LAB	A	MWF	8/11	84	NICKLE

Art 118. Drawing II. Credit 2 hours. Continuation of Art 117. Prequisite: Art 117.

LAB	A	TT	8/11	83	GINZEL
LAB	B	TT	11/2	83	SHOPEN

Art 119. Design. Credit 2 hours. Theory and practice in the elements of design.

LAB	A	TT	11/2	241	GINZEL

Art 120. Design. Credit 3 hours. Continuation of Art 119. Prerequisite: Art 119.

LAB	A	MWF	8/11	241	MASTERTON
LAB	B	MWF	11/2	241	NICKLE

Art 181. Freehand Drawing. Credit 2 hours. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture.

LAB	A	MWF	8/10	83	RICHARDSON
LAB	B	MWF	10/12	83	STABLEFORD
LAB	C	MWF	1/3	83	RICHARDSON
LAB	D	MWF	1/3	91	STABLEFORD

Art 182. Freehand Drawing. Credit 2 hours. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Prerequisite: Art 181.

LAB	A	MWF	8/10	91	STABLEFORD
LAB	B	MF	10/1	91	BURR
LAB	C	TT	8/11	91	BURR
LAB	D	TT	11/2	91	MCNEE
LAB	E	TT	3/6	91	BURR

Art 183. Freehand Drawing. Credit 2 hours. Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art 182.

LAB	B	TT	3/6	83	SHOPEN

Art 184. Freehand Drawing. Credit 2 hours. Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art 183.

LAB	A	TT	8/11	84	RICHARDSON
LAB	B	MF	3/6	84	GINZEL

Art 281. Freehand Drawing. Credit 2 hours. Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184.

LAB	A	TT	3/6	84	MCNEE

BIOLOGICAL SCIENCES

Biology 101. Fundamentals of Biology. Credit 4 hours. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	C	MW	10	213	PRESLEY
LAB	1	TT	3/5	48	
LAB	2	TT	8/10	46	NEWELL
LAB	3	TT	10/12	46	CLAAR
LAB	4	TT	8/10	48	KRISHNA
LAB	5	MW	12/2	48	PRESLEY
LEC	M	TT	9	210	PICKETT
LAB	6	MW	10/12	46	
LAB	7	MW	8/10	46	PRESLEY
LAB	8	MF	2/4	46	KRISHNA
LAB	9	MW	12/2	46	PICKETT
LAB	10	TT	12/2	48	
LAB	11	MW	4/6	46	PERELMUTER

LEC	T	TT	3	213	SPIRAKIS
[redacted]					
LAB	12	TT	3/5	46	PERELMUTER
LAB	13	WF	10/12	48	CLAAR
LAB	14	TT	12/2	46	
LAB	15	WF	2/4	48	NEWELL
LAB	16	MF	4/6	48	KRISHNA

Biology 102. Fundamentals of Biology, Continued. Credit 4 hours. Application of biological principles to the living world. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	Q	TT	12	218	NEWELL
[redacted]					
LAB	39	TT	8/10	45	ROUFFA
LAB	40	WF	8/10	45	SCUDDER
LAB	41	TT	10/12	45	ROUFFA
LAB	42	WF	12/2	45	SHOMAY
LAB	43	WF	4/6	45	NEWELL
LAB	44	TT	3/5	41	DEMBSKI
LEC	M	TT	9	213	PRESLEY
[redacted]					
LAB	45	TT	12/2	41	CLAAR
LAB	46	MW	12/2	41	CLAAR
LAB	47	MW	2/4	41	DEMBSKI
LAB	48	M	10/12	45	KRISHNA
		F	10/12	41	
LAB	49	M	12/2	45	DEMBSKI
		F	12/2	41	

Biology 111. General Botany. Credit 4 hours. The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor.

LEC	M	TT	9	22	GLASSMAN
LAB	50	TT	10/12	48	GLASSMAN

Biology 115. Introductory Systematic Botany (Plant Taxonomy). Credit 4 hours. Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures and laboratory. Prerequisite: Biology 102 or 111.

LEC	C	WF	10	44	GLASSMAN
LAB	52	WF	8/10	44	GLASSMAN

BIOLOGY 120. SURVEY OF PLANT KINGDOM. CREDIT 4 HOURS. A study, at an elementary level, of the life histories of plants representative of algae, fungi, ferns, and seed plants.

LEC	C	MW	10	65	ROUFFA
LAB	54	MW	8/10	48	ROUFFA

Biology 121. Microbiology. Credit 4 hours. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 102 or consent of instructor.

LEC	N	TT	10	22	MADISON
LAB	60	MW	10/12	41	MADISON

Biology 126. Advanced General Bacteriology. Credit 4 hours. General technic, special apparatus and methods. Lectures and laboratory. Prerequisite: Biology 121, credit or registration in Chemistry 105.

LEC	L	TT	8	22	MADISON
LAB	62	MW	8/10	41	MADISON

Biology 131. General Zoology. Credit 4 hours. A survey of the animal kingdom. The structures, functions, life history, adaptations, classification and evolutionary relationships of animals. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	B	WF	9	210	SHOMAY
LAB	70	WF	10/12	45	SANGSTER
LAB	71	TT	12/2	45	SHOMAY

Biology 132. Comparative Vertebrate Anatomy. Credit 5 hours. Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	D	MWF	11	210	SHANK
LAB	72	MWF	8/10	43	
LAB	73	TT	11/2	43	SPIRAKIS
LAB	74	TT	3/6	43	SHOMAY

Biology 136. Bird Study. Credit 2 hours. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation.

LEC	M	TU	9	44	SHANK
LAB	76	TH	8/10	44	SHANK

Biology 141. Vertebrate Physiology. Credit 4 hours. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prequisite: Biology 101.

LEC	P	TT	11	213	PICKETT
LAB	80	TH	8/11	41	SPIRAKIS
QUIZ	80	TU	9	41	SPIRAKIS

Biology 162. Zoology for Pharmacy Students. Credit 4 hours. This course prepares the student in Pharmacy for the upper division studies in Physiology and Pharmacology. Prerequisite: Biology 161.

LEC	B	MWF	9	213	BOND
LAB	90	MWF	10/12	43	SCUDDER
LAB	91	MWF	12/2	43	BOND
LAB	92	MWF	2/4	43	BOND
LAB	93	MWF	4/6	43	DEMBSKI

Biology 333. Vertebrate Embryology. Credit 5 hours. The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 132, junior standing.

LEC	F	MWF	1	210	SANGSTER
LAB	78	MWF	2/4	45	SANGSTER
LAB	79	TT	3/6	45	SCUDDER

BUSINESS LAW

Business Law 100. Basic Principles of Business Law. Credit 3 hours. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

B1	MWF	9	24	FOX
D1	MWF	11	38	FOX

CHEMISTRY

Chem. 101. General Chemistry. Credit 5 hours. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	N	TT	10	204	ELBINGER
LAB	1	MWF	9/11	53	FARAG
QUIZ	1	TT	8	75	FARAG
LAB	2	MWF	11/1	53	JOHNSON
QUIZ	2	TT	11	74	JOHNSON
LAB	3	MWF	1/3	53	ELBINGER/PARE
QUIZ	3	TT	3	76	ELBINGER
LAB	4	MWF	2/4	53	JOHNSON
QUIZ	4	TT	1	74	JOHNSON

Chem. 102. General Chemistry. Credit 3 hours. For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Students with 95 or more credit hours receive only 2 hours credit. Prequisite: One unit of entrance credit in chemistry or equivalent.

LEC	C	WF	10	204	STEINER
LAB	11	TU	8/10	53	HERZOG
QUIZ	11	WF	8	75	STEINER
LAB	12	W	1/3	50	STEINER
QUIZ	12	TT	10	76	STEINER
LAB	13	F	12/2	50	STEINER
QUIZ	13	TT	12	76	STEINER
LAB	14	M	2/4	50	CARBONARO
QUIZ	14	WF	2	75	CARBONARO
LAB	15	M	12/2	50	PARE
QUIZ	15	TT	10	80	PARE

LAB	16	M	10/12	50	MILLER
QUIZ	16	WF	9	74	MILLER
LAB	17	TU	3/5	53	JOHNSON
QUIZ	17	WF	3	74	SEABRIGHT

Chem. 103. General Chemistry. Credit 4 hours. For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 103 or 112.

LEC	P	TT	11	204	KLAAS
LAB	21	WF	8/10	50	HEDBERG
QUIZ	21	TT	8	80	HEDBERG
LAB	22	MW	1/3	50	KLAAS
QUIZ	22	TT	1	76	KLAAS
LAB	23	MW	10/12	50	KLAAS
QUIZ	23	TT	9	75	KLAAS
LAB	24	TT	3/5	50	COWIN
QUIZ	24	WF	1	80	COWIN
LAB	25	TT	9/11	50	CARBONARO
QUIZ	25	MF	11	80	CARBONARO
LAB	34	TT	12/2	50	CARBONARO
QUIZ	34	WF	1	74	CARBONARO

Chem. 104. Chemistry of the Metallic Elements. Credit 4 hours. Limited to students in engineering curricula. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105, 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

Lecture and laboratory-quiz sections in this course are coordinate. The laboratory-quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	C	WF	10	210	HUITEMA
LAB	36	WF	8/10	50	SACKHEIM
QUIZ	36	TT	8	74	SACKHEIM
LAB	37	MW	11/1	50	SACKHEIM/FARAG
QUIZ	37	TT	12	74	SACKHEIM

LAB	38	TT	8/10	50	DAFLER
QUIZ	38	MW	8	74	DAFLER
LAB	39	TT	10/12	50	BACHRACH
QUIZ	39	TT	8	76	BACHRACH
LAB	40	TT	10/12	50	PERRY/DAFLER
QUIZ	40	MW	11	74	PERRY
LEC	P	TT	11	210	SCHRAGE
LAB	44	TT	9/11	50	SACKHEIM
QUIZ	44	MF	10	74	SACKHEIM
LAB	47	TT	3/5	50	CASTEN
QUIZ	47	WF	2	76	CASTEN
LAB	48	WF	12/2	50	PERRY
QUIZ	48	WF	9	75	PERRY
LAB	49	MF	2/4	50	PERRY
QUIZ	49	TT	4	74	PERRY

Chem. 105. Inorganic Chemistry and Qualitative Analysis. Credit 5 hours. For students who are not eligible for Chemistry 104 or 106. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

Lecture and laboratory-quiz sections in this course are coordinate. The laboratory-quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	E	WF	12	210	HUNT
LAB	51	MWF	8/10	53	PARE
QUIZ	51	TT	9	76	PARE
LAB	52	MWF	10/12	53	CASTEN
QUIZ	52	TT	12	80	CASTEN
LAB	53	MWF	3/5	53	HERZOG
QUIZ	53	TT	3	75	HERZOG
LAB	54	TT	3/6	53	SAVOY
QUIZ	54	WF	3	75	SAVOY

LAB	55	MWF	9/11	53	TRAXLER
QUIZ	55	TT	12	75	TRAXLER
LEC	Q	TT	12	210	HUNT
LAB	56	MWF	1/3	53	LOTHIAN
QUIZ	56	WF	12	80	LOTHIAN
LAB	57	MWF	4/6	53	POTEMPA/SAVOY
QUIZ	57	MW	3	80	POTEMPA
LAB	58	MWF	12/2	53	HERZOG
QUIZ	58	TT	11	76	HERZOG
LAB	59	TT	8/11	53	HUNT
QUIZ	59	WF	9	76	HUNT

Chem. 106. Inorganic Chemistry. Credit 5 hours. Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104, 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	H	WF	3	204	RIETZ
LAB	61	MWF	1/3	50	SEABRIGHT
QUIZ	61	TT	11	75	SEABRIGHT
LAB	62	TT	3/6	50	RIETZ
QUIZ	62	WF	4	74	RIETZ

Chem. 108. General Chemistry and Qualitative Analysis. Credit 5 hours. For students in curricula in chemistry or chemical engineering. Students with 95 or more credit hours receive only 3 hours credit. Credit is not granted to students who have received credit in Chemistry 104, 105, 106, or 109. Prerequisite: Chemistry 107.

LEC	N	TT	10	210	WELDON
LAB	66	MWF	8/10	53	WELDON/LOTHIAN
QUIZ	66	WF	10	75	WELDON
LAB	67	MWF	1/3	53	TRAXLER
QUIZ	67	TT	3	80	TRAXLER
LAB	68	MWF	11/1	53	HEDBERG
QUIZ	68	M	10	80	HEDBERG
		TH	11	80	HEDBERG

Chem. 109. General and Inorganic Chemistry. Credit 5 hours. A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Limited to students in the engineering and physics curricula. Not open to students who have college credit in chemistry. Student with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry, as shown by placement examination.

LEC	F	MWF	1	204	HUITEMA
LAB	71	W	9/12	50	ELBINGER
QUIZ	71	MF	10	76	ELBINGER
LAB	72	TU	9/12	50	HUITEMA/TRAXLER
QUIZ	72	TT	1	80	HUITEMA

Chem. 110. Qualitative Analysis. Credit 5 hours. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major in chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106 or equivalent.

LEC	T	TT	3	210	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12	53	MANSFIELD
QUIZ	76	MW	3	76	MANSFIELD

Chem. 122. Elementary Quantitative Analysis. Credit 5 hours. Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Prerequisite: Chemistry 105 or equivalent.

LEC	Q	TT	12	204	BABLER
LAB	81	MWF	8/11	54	LOTHIAN/GOTTLIEB
QUIZ	81	TH	9	74	LOTHIAN
LAB	83	MWF	10/1	54	DAFLER
QUIZ	83	TU	10	75	DAFLER

Chem. 123. Quantitative Analysis for Engineers. Credit 5 hours. A course in quantitative analysis designed for the needs of engineers, especially ceramic and metallurgical. Prerequisite: Chemistry 104, 105 or 109.

LEC	Q	TT	12	65	GOTTLIEB
LAB	85	MWF	1/4	54	GOTTLIEB
QUIZ	85	TH	3	74	GOTTLIEB

Chem. 124. Quantitative Analysis. Credit 5 hours. For all students in the chemistry curriculum and chemical engineering. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	T	TT	3	204	BABLER
LAB	86	MWF	12/3	54	BABLER/PARE
QUIZ	86	TU	1	75	BABLER

Chem. 132. Elementary Organic Chemistry. Credit 3 hours. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum. Prerequisite: Chemistry 101, 102, 109 or equivalent.

LEC	E	WF	12	65	WELDON
LAB	90	TH	9/12	52	CASTEN
QUIZ	90	TU	10	74	CASTEN

Chem. 133. Elementary Organic Chemistry. Credit 5 hours. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Prerequisite: Chemistry 105 or equivalent.

LEC	E	WF	12	204	CRUM
EXAM	EX	M	12	204	
LAB	91	TT	9/12	52	CRUM/MANSFIELD
QUIZ	91	M	9	75	CRUM
LAB	92	MW	2/5	52	CRUM
QUIZ	92	F	2	80	CRUM
LAB	93	WF	9/12	52	SEABRIGHT
QUIZ	93	M	10	75	SEABRIGHT

Chem. 234. Organic Chemistry. Credit 5 hours. For students whose major is chemistry, or for those registered in the curriculum in chemistry or chemical engineering. Prerequisite: Chemistry 124.

LEC	R	TT	1	65	BACHRACH
LAB	96	MW	9/12	52	BACHRACH
QUIZ	96	F	10	80	BACHRACH

Chem. 247. Elementary Physical Chemistry. Credit 4 hours. For premedical students and others not in chemistry and engineering curricula. Lectures and laboratory. Prerequisite: Chemistry 122 and 133; Physics 102, or equivalent.

LEC	D	MWF	11	76	SCHRAGE
LAB	98	TU	3/6	50A	SCHRAGE

CIVIL ENGINEERING

C. E. 210. Properties of Soils. Credit 3 hours. Identification and classification of earth materials; hydraulic and mechanical properties of soils; character of natural soil deposits; and appraisal of methods of subsurface exploration. Laboratory determination of the index properties of soils. Prerequisite: Theoretical and Applied Mechanics 150, Geology 150, and junior standing in engineering or architecture.

LEC	B1	MF	9	63	BERATAN
LAB	B	W	1/4	61	BERATAN

C. E. 214. Composition and Properties of Concrete. Credit 2 hours. Properties and uses of cements, aggregates, mixing water, and admixtures; composition and properties of concrete mixtures; field practices in the production of concrete. Laboratory practice in the design and control of quality concrete. Prerequisite: Theoretical and Applied Mechanics 223, or 224, and junior standing in engineering or architecture, or consent of instructor.

LAB	A	TT	10/12	63	COE

C. E. 215. Engineering and Construction Economy. Credit 3 hours. An introduction to engineering and construction economy; fundamentals of engineering and construction costs; engineering and construction economy studies; and mathematics of finance. Prerequisite: Junior standing.

LEC	G1	MWF	2	63	COE

C. E. 261. Theory of Determainate Structures. Credit 3 hours. A study of the fundamental theory of statically determinate structures with applications to the evaluation of reactions, shears, and moments in beams and stresses in trusses for fixed and moving loads; introduction to deflection computations. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

LEC	E1	MWF	12	63	PABARCIUS

ECONOMICS

Econ. 100. Introduction to Business. Credit 3 hours. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only.

C1	MWF	10	20	SHAW
D1	MWF	11	20	SHAW
F1	MWF	1	19	DICKETT
H1	MWF	3	22	SHAW
M1	MTT	9	20	FERRERA
P1	MTT	11	17	FERRERA
R1	MTT	1	23	GELDARD
T1	MTT	3	16	DICKETT

Econ. 102. Principles of Economics I. Credit 3 hours. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Prerequisite: One year of college work.

B1	MWF	9	17	MILLER
C1	MWF	10	17	MILLER
E1	MWF	12	17	SELTZER
F1	MWF	1	17	SELTZER
N1	MTT	10	38	LARSON

Econ. 103. Principles of Economics II. Credit 3 hours. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Prerequisite: Economics 102.

C1	MWF	10	22	GILLETT
H1	MWF	3	38	GRAMPP
J1	MWF	4	38	GRAMPP
Q1	MTT	12	18	MILLER
R1	MTT	1	18	MILLER

Econ. 108. Elements of Economics. Credit 3 hours. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	24	DUNNE
F1	MWF	1	24	DUNNE
G1	MWF	2	22	SHAW
H1	MWF	3	17	SELTZER
J1	MWF	4	17	SELTZER
P1	MTT	11	23	GRAMPP
Q1	MTT	12	23	GRAMPP

Econ. 136. American Economic History. Credit 3 hours. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Open to freshmen and sophomore only.

D1	MWF	11	16	CRABB
E1	MWF	12	16	CRABB
E2	MWF	12	38	DICKETT
G1	MWF	2	17	CRABB
G2	MWF	2	16	FERRERA
J1	MWF	4	21	FERRERA
M1	MTT	9	19	GELDARD
N1	MTT	10	19	GELDARD
T1	MTT	3	20	GELDARD
U1	MTT	4	16	DICKETT

Econ. 138. European Economic History. Credit 3 hours. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open to freshmen and sophomores only.

	B1	MWF	9	18	CRABB

Econ. 170. Elements of Statistics. Credit 3 hours. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Prerequisite: Economics 102 or 108; sophomore standing.

QUIZ	B1	MW	9	33	DERRICK
LAB	1	F	9/11	33	DERRICK
QUIZ	D1	MW	11	33	DERRICK
LAB	2	F	11/1	33	DERRICK
QUIZ	G1	MW	2	33	DERRICK
LAB	3	F	2/4	33	DERRICK
QUIZ	Q1	MTU	12	33	LARSON
LAB	4	TH	12/2	33	LARSON
QUIZ	T1	MTU	3	33	LARSON
LAB	5	TH	3/5	33	LARSON

EDUCATION

Ed. 101. Nature of the Teaching Profession. Credit 2 hours. An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

M1	TT	9	28	RICKS
D1	WF	11	17	RICKS
R1	TT	1	28	RICKS

Ed. 109. Educational Psychology. Credit 3 hours. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Prerequisite: Psychology 100.

N1	TTF	10	28	RICKS

Ed. 201. Foundations of American Education. Credit 2 hours. A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

Q1	TT	12	16	LITTLE
R1	TT	1	22	LITTLE
T1	TT	3	28	LITTLE

ELECTRICAL ENGINEERING

E. E. 126. Electric Circuits and Fields. Credit 4 hours. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	D1	MWF	11	134	KLAPPERICH
LAB	D	TU	9/12	120	KLAPPERICH
QUIZ	H1	MWF	3	134	KLAPPERICH
LAB	H	TH	3/6	120	KLAPPERICH

ENGLISH

English 101. Introduction to Poetry. Credit 3 hours. Understanding of poetry through the reading and discussion of representative poems. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	215	I MILLER
D1	MWF	11	215	COX
G1	MWF	2	215	F JOHNSON
N1	M	10	219	JACKMAN
	TT	10	215	
T1	MTT	3	212	GALLAGHER

English 102. Introduction to Drama. Credit 3 hours. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	214	DAVIS
D1	MWF	11	212	WEISS
N1	M	10	214	LOVE
	TT	10	212	
R1	M	1	214	MACKIN
	TT	1	212	
U1	MTT	4	212	NICHOLAS

English 103. Introduction to Fiction. Credit 3 hours. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's *Pride and Prejudice,* Balzac's *Pere Goriot,* Arnold Bennett's *Old Wives' Tale,* Dostoevski's *Crime and Punishment,* Robert Penn Warren's *All the King's Men* and the anthology *Reading Modern Short Stories.* Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	215	HARRIS
C1	MWF	10	212	KERWICK

H1	MWF	3	215	CASSELL
J1	MWF	4	215	RUDIN
L1	M	8	219	LEONHARD
	TT	8	212	
P1	M	11	214	S MILLER
	TT	11	215	
Q1	M	12	219	GRIEST
	TT	12	215	

English 113. American Literature. Credit 3 hours. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

A1	MWF	8	212	STRONKS
F1	MWF	1	212	WILLETT
M1	TT	9	215	JORDAN
	F	9	116	
Q1	MTT	12	212	KARANIKAS

English 114. American Literature. Credit 3 hours. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	212	STRONKS
G1	MWF	2	212	WILLETT
M1	M	9	219	KARANIKAS
	TT	9	212	
P1	TT	11	212	RUNYAN
	F	11	216	

English 121. Chief English Writers Before 1800. Credit 3 hours. *Canterbury Tales Utopia,* two plays by Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas.* This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

F1	MWF	1	215	ATWOOD

English 122. Chief English Writers of the Nineteenth Century. Credit 3 hours. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam,* readings from T. H. Huxley, Browning's poems, and one novel. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	M	12	214	J JOHNSON
	WF	12	212	

English 123. Chief Modern English Writers. Credit 3 hours. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	215	WEISS

English 131. Introduction to Shakespeare. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	215	VEST

FRENCH

French 101. Elementary Course. Credit 4 hours. Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	222	LEIN
C1	TWTF	10	222	LEIN
E1	TWTF	12	222	LUTTON
H1	TWTF	3	224	LUTTON
J1	TWTF	4	226	LALLAS

French 102. Elementary Course. Credit 4 hours. Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	224	SKOGEN
C1	TWTF	10	224	SKOGEN
D1	TWTF	11	222	LUTTON
F1	TWTF	1	222	LUTTON
H1	TWTF	3	226	LALLAS

French 103. Modern French. Credit 4 hours. Rapid reading of modern authors, syntax, and composition; some conversational practice. Prerequisite: French 102 or two years of high school French.

B1	TWTF	9	222	LEIN
E1	TWTF	12	224	SKOGEN

French 104. Modern French. Credit 4 hours. Continuation of French 103. Prerequisite: French 103 or three years of high school French.

B1	TWTF	9	226	SCHUYLER
C1	TWTF	10	226	SCHUYLER
F1	TWTF	1	224	SKOGEN

French 202. Introduction to French Literature. Credit 3 hours. Continuation of French 201. Prerequisite: French 104 or four years of high school French.

P1	TTF	11	226	SCHUYLER

GENERAL ENGINEERING

G. E. 101. Engineering Graphical Communication. Credit 3 hours. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Prerequisite: Plane geometry.

A1	MWF	8/10	135	BOUC
A2	MWF	8/10	136	MOSILLO
B1	MWF	10/12	135	WALRAVEN
B2	MWF	10/12	136	MOSILLO
C1	MWF	12/2	135	DEMBSKI
C2	MWF	12/2	136	CARLSON
D1	MWF	2/4	135	DEMBSKI
D2	MWF	2/4	136	SCHROEDER F
F1	TT	8/11	135	WALRAVEN
F3	TT	8/11	137	CALDARIO
G1	TT	11/2	135	BLAIR
G3	TT	11/2	137	KOHLER

G. E. 102. Engineering Geometry. Credit 3 hours. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Prerequisite: General Engineering 101.

A3	MWF	8/10	137	KOHLER
A4	MWF	8/10	141	ROYSTER
A5	MWF	8/10	143	DEFOTIS
A6	MWF	8/10	145	CALDARIO
B3	MWF	10/12	137	KOHLER
B4	MWF	10/12	141	ROYSTER
B5	MWF	10/12	143	GOPPERT
B6	MWF	10/12	145	CALDARIO
C3	MWF	12/2	137	SETTON
C4	MWF	12/2	141	BLAIR
C5	MWF	12/2	143	SCHROEDER F
D3	MWF	2/4	137	SETTON
D4	MWF	2/4	141	BLAIR

D5	MWF	2/4	143	MOSILLO
F4	TT	8/11	141	DEMBSKI
F5	TT	8/11	143	GOPPERT
G4	TT	11/2	141	BOUC
G5	TT	11/2	143	SCHROEDER F

G. E. 107. Architectural Projections. Credit 2 hours. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Prerequisite: Plane geometry.

* **Section for Art students only.**

G6	TT	11/2	145	BUSS
C6	MWF	12/2	145	BUSS
* F6	TT	8/11	145	HOLLADAY

G. E. 108. Architectural Projections. Credit 2 hours. Shades and shadows; oblique, isometric, and perspective drawings; developments. Prerequisite: General Engineering 107.

A7	MWF	8/10	146	SHAPIRO
B7	MWF	10/12	146	BUSS
C7	MWF	12/2	146	HOLLADAY
D7	MWF	2/4	146	HOLLADAY
G7	TT	11/2	146	SHAPIRO

G. E. 112. General Engineering Technology. Credit 2 hours. For mechanical engineers. Prerequisite: General Engineering 102 or consent of instructor.

F2	TT	8/10	136	BOUC
G2	TT	12/2	136	ROYSTER

G. E. 210. Industrial Production Illustration. Credit 3 hours. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. Prerequisite: General Engineering 102, or 107 and 108.

D6	MWF	2/4	145	SHAPIRO

G. E. 212. Graphical Calculation. Credit 1 hour. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

N2	TT	10	136	SETTON
P2	TT	11	136	DEFOTIS

GEOGRAPHY

Geog. 104. World Regional Geography. Credit 3 hours. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Students with 95 or more credit hours receive only 2 hours credit.

N1	TTF	10	14	COLBY
R1	MTT	1	14	COLBY

Geog. 105. Introductory Economic Geography. Credit 3 hours. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students, but open to others. Students with 95 or more credit hours receive only 2 hours credit.

B1	MW	9	14	FINNEY
	F	9	13	

Geography 107. Weather and Climate. **Credit 4 hours. Planetary relations; the atmosphere; its composition, functions and behavior in the production of various weather types; air masses and air mass analysis; climatic types and climatic regions; application to present day activities. This course and Geography 108 meet the general education requirements in physical sciences in Liberal Arts and Sciences. Lectures, quiz and laboratory. Prerequisite: none.**

LEC	M1	TT	9	218	RHEUMER
LAB	1	TU	12/2	13	RHEUMER
QUIZ	1	TH	1	13	RHEUMER
LAB	2	W	8/10	13	RHEUMER
QUIZ	2	F	8	13	RHEUMER
LAB	3	W	10/12	13	CUTSHALL
QUIZ	3	F	11	13	CUTSHALL

Geography 108. Landforms and Earth Resources. **Credit 4 hours. The study of landforms from the geographic point of view; maps and their use; earth resources (native vegetation, soils, water resources, mineral resources); their development and utilization. This course and Geography 107 meet the general education requirements in physical sciences in Liberal Arts and Sciences. Lectures, quiz and laboratory. Prerequisite: none.**

LEC	N1	TT	10	218	FINNEY
LAB	11	M	10/12	13	CUTSHALL
QUIZ	11	F	10	13	CUTSHALL
LAB	12	TU	8/10	13	FINNEY
QUIZ	12	TH	8	13	FINNEY
LAB	13	W	1/3	13	FINNEY
QUIZ	13	F	1	13	FINNEY

Geog. 114. Conservation of Natural Resources. Credit 3 hours. Elements of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis given to the general principles of conservation as they apply to the United States. Prerequisite: Sophomore standing.

P1		TTF	11	14	RHEUMER

GEOLOGY

Geol. 101. Physical Geology. Credit 4 hours. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	204	KARPINSKI
LAB	1	TU	8/10	42	KURS
QUIZ	1	TH	8	42	KURS
LAB	2	TH	10/12	42	DEMAR
QUIZ	2	TU	11	42	DEMAR
LAB	3	W	12/2	42	KURS
QUIZ	3	F	12	42	KURS
LAB	4	W	2/4	42	KARPINSKI
QUIZ	4	F	2	42	KARPINSKI
LAB	5	M	11/1	42	KURS
QUIZ	5	F	11	42	KURS

Geol. 102. Historical Geology. Credit 4 hours. Evolution of the earth and its life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or equivalent.

LEC	H	WF	3	210	DEMAR
LAB	11	W	10/12	42	DEMAR
QUIZ	11	F	10	42	DEMAR
LAB	12	TU	3/5	42	DEMAR
QUIZ	12	TH	3	42	DEMAR

Geol. 110. Field Work. Credit 2 hours. Field observation in St. Francois Mountains and adjacent parts of Missouri and Illinois. (During spring vacation.) Two three-hour class meetings to be arranged. Credit is given only on completion of a satisfactory written report. Prerequisite: Geology 101, 150, or Physical Science 102.

LAB	18	Field trip Thurs.,Apr. 14 thru Tues.,Apr.19 (6 days). Report due by Fri.,May 20.			STAFF

Geol. 132. Mineralogy. Credit 4 hours. A systematic study of minerals and rocks. The geologic relationships of minerals and rocks are emphasized. The common silicate minerals and the important varieties of rocks are studied in the laboratory. Lecture and laboratory. Prerequisite: Geology 131.

LAB	19	MWF	8/10	42	KURS

Geol. 150. Geology for Engineers. Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	D	MW	11	204	KARPINSKI
LAB	21	M	1/3	42	KARPINSKI
LAB	22	F	3/5	42	KARPINSKI

GERMAN

German 101. Elementary Course. Credit 4 hours. Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	219	
B1	TWTF	9	219	WILLNER
C1	TWTF	10	219	WILLNER
D1	TWTF	11	219	TEICHMANN
F1	TWTF	1	219	HOUGH
H1	TWTF	3	219	HOUGH

German 102. Elementary Course. Credit 4 hours. Continuation of German 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

A1	TWTF	8	220	HARTOCH
B1	TWTF	9	220	
C1	TWTF	10	220	
D1	TWTF	11	220	BRAUNFELD
D2	TWTF	11	221	HOUGH
E1	TWTF	12	220	HOUGH
F1	TWTF	1	220	TEICHMANN
H1	TWTF	3	220	BRAUNFELD

German 103. Intermediate Course. Credit 4 hours. Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, two years of high school German, or equivalent.

C1	TWTF	10	221	VARDAMAN
E1	TWTF	12	221	BRAUNFELD
F1	TWTF	1	221	BRAUNFELD

German 104. Intermediate Course. Credit 4 hours. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, three years of high school German, or equivalent.

B1	TWTF	9	223	HARTOCH
D1	TWTF	11	223	WILLNER
E1	TWTF	12	223	TEICHMANN
F1	TWTF	1	223	WILLNER
H1	TWTF	3	223	TEICHMANN

German 210. Masterpieces of German Literature. Credit 3 hours. Introduction to German literature, in subjects, forms, and ideals. Prerequisite: Two years of college German, or equivalent.

Q1	TTF	12	225	VARDAMAN

HISTORY

Hist. 112. History of Western Civilization from 1815 to the Present. Credit 4 hours. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

Lecture and quiz sections in this course are coordinate. The quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	P1	TT	11	218	NICHOLSON
QUIZ	F1	WF	1	37	GOODMAN
QUIZ	G1	WF	2	37	GOODMAN
QUIZ	Q1	TT	12	19	NICHOLSON
QUIZ	R1	TT	1	19	NICHOLSON
QUIZ	R2	TT	1	97	GOODMAN
LEC	F1	MW	1	218	UNFER
QUIZ	H1	MW	3	37	UNFER
QUIZ	L1	TT	8	19	UNFER
QUIZ	M1	TT	9	18	UNFER
QUIZ	P1	TT	11	19	UNFER

Hist. 132. History of England from 1714 to the Present. Credit 4 hours. A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1714 to the present. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	213	GOODMAN
QUIZ	M1	TTF	9	37	GOODMAN
QUIZ	N1	TTF	10	37	GOODMAN
QUIZ	P1	TTF	11	37	ASCH
QUIZ	Q1	TTF	12	37	ASCH

Hist. 152. History of the United States from 1865 to the Present. Credit 3 hours. A century of national life and organization. Prerequisite: Sophomore standing.

LEC	C1	M	10	218	RIDDLE
QUIZ	D1	MW	11	82	UNFER
QUIZ	F1	M	1	37	RIDDLE
		W	1	18	
QUIZ	N1	TT	10	82	RIDDLE
QUIZ	P1	TT	11	82	BILL
QUIZ	R1	TT	1	82	BILL

Hist. 182. The Ancient World. Credit 3 hours. Rome. Prerequisite: Sophomore standing.

M1	TTF	9	97	NICHOLSON

HIST. 370. CONSTITUTIONAL DEVELOPMENT OF THE UNITED STATES SINCE 1865. Credit 3 hours. Prerequisite: one year of college history or political science.

P1	MTT	11	28	RIDDLE

HUMANITIES

Humanities 102. Values in Literature. Credit 4 hours. A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. Prerequisite: Humanities 101.

B1	TWTF	9	214	RUNYAN
C1	TWTF	10	214	JORDAN
F1	TWTF	1	214	BLUM
H1	TWTF	3	214	BLUM

Humanities 152. The Heritage of Western Culture. Credit 4 hours. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. This course, plus Humanities 151, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	TWTF	11	214	VARDAMAN
E1	TWTF	12	214	SCHILLER
H1	TT	3	215	SCHILLER
	WF	3	212	

HYGIENE

Hygiene 104. Personal and Community Hygiene. Credit 2 hours. This course covers basic principles of hygiene. Especially recommended for those going into teaching, occupational therapy, social work, etc. Students with 95 or more credit hours receive only 1 hour credit.

A	WF	8	229	STAFF
F	WF	1	229	STAFF
G	WF	2	229	STAFF
L	TT	8	229	STAFF
M	TT	9	229	STAFF
P	TT	11	229	STAFF
R	TT	1	229	STAFF

Hygiene 110. Public Health. Credit 2 hours. Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P	TT	11	20	STAFF

MANAGEMENT

Management 101. Industrial Organization and Management. Credit 3 hours. Organization plans, administrative policies, and management problems with special attention to manufacturing units. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

D1	MWF	11	22	GILLETT
F1	MWF	1	38	GILLETT
G1	MWF	2	38	GILLETT
M1	MTT	9	21	KNUDSON
N1	MTT	10	21	KNUDSON

MARKETING

Marketing 101. Principles of Marketing. Credit 3 hours. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

E1	MWF	12	24	KNUDSON
G1	MWF	2	20	KNUDSON

MATHEMATICS

Math. 101. Basic Mathematics. Credit 3 hours. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry.

P1	TT	11	102	LUMLEY
	F		106	LUMLEY
G1	MWF	2	101	NOLAN

Math. 103. Introduction to College Algebra. Credit 3 hours. Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MTWTF	8	101	LUMLEY
B1	MTWTF	9	103	ONDRAK
C1	MTWTF	10	103	SJOBLOM
D1	MTWTF	11	103	OLSEN
E1	MWF	12	103	SEARS
F1	MTWTF	1	94	ZYGMUND
F2	MWF	1	96	LINN
F3	MTWTF	1	103	NOLAN
F4	MTWTF	1	101	KUZMANIC
G1	MWF	2	102	MERTES
H1	MTWTF	3	101	MERTES
H2	MTWTF	3	94	GORDON
J1	MTWTF	4	106	LARIVIERE
J2	MTWTF	4	111	ALBERTI

Math. 108. Elementary Plane Geometry for Veterans. No credit. This course deals with the usual topics of high school geometry. It is designed as a refresher course for those who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

G1	MWF	2	104	WILEY

Math. 110. Fundamentals of Mathematics. Credit 4 hours. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Prerequisite: Mathematics 109.

D1	MTWT	11	106	HARTLEY

Math. 111. Algebra. Credit 5 hours. Students having 1½ or more units of high school algebra may not take this course unless they have the approval of their college office. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Entrance algebra, 1 unit and plane geometry, 1 unit. Required for students in Architecture deficient in algebra. Other students admitted only by consent of their college office and the mathematics Department.

B1	MTWTF	9	111	OLSEN
E1	MTWTF	12	101	SCHOLOMITI

Math. 112. College Algebra. Credit 3 hours. Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

*** sections open to Commerce students only.**

* A1	MWF	8	106	VEDRAL
A2	MWF	8	102	SJOBLOM
* B1	MWF	9	101	LUMLEY
B2	MWF	9	102	BALLARD
C1	MWF	10	101	ONDRAK
* C2	MWF	10	104	BERGLUND
C3	MWF	10	102	VEDRAL
D1	MWF	11	102	ZYGMUND
* D2	MWF	11	111	BERGLUND
E1	MWF	12	102	FRANK
E2	MWF	12	94	HARTLEY
F1	MWF	1	105	HILL
F2	MWF	1	104	SEARS
* G1	MWF	2	105	SCHOLOMITI
G2	MWF	2	111	PENNISI
H1	MWF	3	106	HENDERLEITER
J1	MWF	4	103	LASHER
J2	MWF	4	102	WILEY

Math. 114. Plane Trigonometry. Credit 2 hours. Identities, equations, addition formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	106	VEDRAL
L2	TT	8	96	ZIOMEK
M1	TT	9	106	LUMLEY
N1	TT	10	102	FEINSTEIN
N2	TT	10	96	SEARS
N3	TT	10	101	ZIOMEK
P1	TT	11	104	BERGLUND
P2	TT	11	96	MURPHY
Q1	TT	12	106	ZYGMUND
Q2	TT	12	111	NOLAN
Q3	TT	12	96	KUZMANIC
R1	TT	1	104	HILL
R2	TT	1	106	WILEY
R3	TT	1	102	GORDON
T1	TT	3	106	HENDERLEITER
U1	TT	4	104	MERTES
U2	TT	4	96	LASHER

Math. 123. Analytic Geometry. Credit 5 hours. Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 112 and 114.

A1	MTWTF	8	104	BALLARD
B1	MTWTF	9	104	VEDRAL
B2	MTWTF	9	100	ZIOMEK
C1	MTWTF	10	100	LINN
D1	MTWTF	11	101	LINN
D2	MTWTF	11	100	FEINSTEIN
E1	MTWTF	12	100	MURPHY
F1	MTWTF	1	100	HENDERLEITER
H1	MTWTF	3	103	LARIVIERE
H2	MTWTF	3	100	LASHER
H3	MTWTF	3	104	ALBERTI

Math. 133. Calculus. Credit 3 hours. First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Prerequisite: Mathematics 123.

A1	MWF	8	96	ZIOMEK
C1	MWF	10	96	BALLARD
D1	MWF	11	104	FRANK
D2	MWF	11	96	NOLAN
E1	MWF	12	96	ZYGMUND
E2	MWF	12	104	OLSEN
G1	MWF	2	96	LARIVIERE
G2	MWF	2	103	HILL
G3	MWF	2	94	HENDERLEITER
G4	MWF	2	100	ALBERTI
H1	MWF	3	96	PENNISI
J1	MWF	4	96	MERTES

Math. 143. Calculus. Credit 5 hours. Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expansion of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Prerequisite: Mathematics 133.

A1	MTWTF	8	105	ONDRAK
B1	MTWTF	9	105	SJOBLOM
C1	MTWTF	10	105	SCHOLOMITI
D1	MTWTF	11	105	SEARS
E1	MTWTF	12	105	BERGLUND
H1	MTWTF	3	105	HILL
H2	MTWTF	3	111	WILEY

Math. 161. Statistics. Credit 3 hours. An Elementary course in the basic concepts of probability and statistics, Arrangement and analysis of raw data, hypothesis testing, confidence limits and method of least squares. Prerequisite: Mathematics 112; sophomore standing.

F1	MWF	1	102	GORDON

Math. 263. Statistics in Engineering and Physical Sciences. Credit 3 hours. A first course in the use of statistical methods for interpreting the results of experiments. Applications to engineering and the physical sciences are emphasized. Prerequisite: One year of calculus.

F1	MWF	1	111	LASHER

Math.315. Linear Transformations and Matrices. Credit 3 hours. A survey course in elementary matrix algebra, covering vector space, linear transformations, representation of transformations by matrices. Prerequisite: One year of calculus.

E1	MWF	12	111	PENNISI

Math.342. Differential Equations. Credit 3 hours. An introductory course in partial differential equations, boundary value problems, Fourier Series. Prerequisite: Mathematics 341.

C1	MWF	10	111	FRANK

Math. 343. Advanced Calculus. Credit 3 hours. The course includes the vector calculus, differential and integral calculus of functions of several variables, infinite series, power series, and line and surface integrals. Prerequisite: One year of calculus.

B1	MWF	9	106	CURTIS
F1	MWF	1	106	MURPHY

Math. 345. Differential Equations and Orthogonal Functions. Credit 3 hours. Theory of solving the standard elementary differential equations and application of these. Power series, solutions of second order equations and operational methods are included. A brief introduction is given to partial differential equations and Fourier series methods. Prerequisite: One year of calculus.

C1	MWF	10	106	HARTLEY
E1	MWF	12	106	FEINSTEIN
G1	MWF	2	106	GORDON

MECHANICAL ENGINEERING

M. E. 182. Manufacturing Processes. Credit 3 hours. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Prerequisite: General Engineering 101, sophomore standing.

	B1	MWF	9	65	STAFF

M. E. 183. Materials Casting. Credit 3 hours. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Prerequisite: General Engineering 101; sophomore standing.

LEC	D	MF	11	65	SCHROEDER
LAB	A	TU	8/11	71	SCHROEDER
LAB	B	W	11/2	71	SCHROEDER

M. E. 184. Metal Processing. Credit 3 hours. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Prerequisite: Sophomore standing; General Engineering 101.

LEC	P	TT	11	65	PERKINS
LAB	B	W	11/2	64	PERKINS/STANLEY
LAB	C	F	2/5	64	PERKINS/STANLEY

M. E. 209. Thermodynamics and Heat Transfer. Credit 3 hours. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Prerequisite: Physics 107, Mathematics 142 or 143.

	F1	MWF	1	65	COBB

M. E. 221. Mechanics of Machinery. Credit 5 hours. Linkages, cams, and gears; belts, ropes, and chains; velocities, accelerations, and inertia forces in machines; vibrations and critical speeds; balancing of engines; principle of the gyroscope. Prerequisite: T.A.M. 156 or registration in Theoretical and Applied Mechanics 211.

LEC	D1	MWF	11	110	DEFOTIS
LAB	D	TT	8/11	146	DEFOTIS

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. Freshman Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: American military history, and leadership, drill, and command. Prerequisite: Military Science 101 or equivalent.

QUIZ	1	MW	9	228	CLAMPITT
QUIZ	2	TT	9	228	CLAMPITT
QUIZ	3	MW	10	228	CLAMPITT
QUIZ	4	TT	10	228	CLAMPITT
QUIZ	5	MW	11	228	CLAMPITT
QUIZ	6	TT	11	228	CLAMPITT
LAB	1	TU	8	AUD	JONES
LAB	2	W	8	AUD	JONES
LAB	3	TH	8	AUD	JONES

Mil. Sci. 104. Sophomore Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: Crew-served weapons and gunnery; elementary communications and leadership, drill, and command. Prerequisite: Military Science 103 or equivalent.

QUIZ	1	TT	9	230	CHAMBERS
QUIZ	2	MW	10	230	CHAMBERS
QUIZ	3	TT	10	230	CHAMBERS
QUIZ	4	MW	11	230	CHAMBERS
LAB	1	TU	8	AUD	CRUMPACKER
LAB	2	W	8	AUD	CRUMPACKER
LAB	3	TH	8	AUD	CRUMPACKER

MUSIC

Music 100. Rudiments of Theory. Credit 2 hours. Notation, scales, intervals, chords, terminology.

D1	MWF	11	354	FISSINGER

Music 131. Introduction to the Art of Music, II. Credit 3 hours. Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only.

C1	MWF	10	354	FISSINGER

Music 150. Music Ensemble. Credit ½ hour. Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit.

A	TT	2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
C	F	3/5	354	FISSINGER

Sectional rehearsals to be arranged.

PHARMACY

Pharmacy 102. Pharmaceutical Processes. Credit 3 hours. A study of pharmaceutical processes and manipulations, definitions, nomenclature. Laboratory work consists of experiments to illustrate the important pharmaceutical technics. Prerequisite: Pharmacy 100.

R1	TU	1	210	STAFF
	TH	2	SB	
1	TH	3/5	200	

NOTE: Room 210 is at Navy Pier; 200 and SB are at the Professional Campus.

PHILOSOPHY

Phil. 101. Introduction to Philosophy. Credit 3 hours. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form an approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

C1	MWF	10	97	PAGE
E1	MWF	12	97	PAGE
R1	M	1	97	MORRIS
	TT	1	24	

Phil. 102. Logic. Credit 3 hours. Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

B1	MWF	9	82	PAGE
N1	TT	10	23	MORRIS
	F	10	38	
D1	MWF	11	97	MORRIS
G1	MWF	2	97	MORRIS

Phil. 105. Moral Ideas and Practice. Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Q1	TT	12	24	PAGE
P1	TT	11	16	PAGE

PHYSICAL EDUCATION FOR MEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

*** Special conditioning sections or Adaptive only.**

P. E. M. 101, 102, 103, 104. Prescribed Exercises. Credit 1 hour. Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

C	MWF	10	GYM	MAKSUD
D	MWF	11	GYM	NEMOTO
E	MWF	12	GYM	MAKSUD
F	MWF	1	GYM	NEMOTO

P. E. M. 106. Developmental Activities. Credit 1 hour. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards.

*	A	MWF	8	GYM	MAKSUD
	B	MWF	9	GYM	MILLER
	C	MWF	10	GYM	FORDHAM
	D	MWF	11	GYM	RADER
	E	MWF	12	GYM	VERSEN
	F	MWF	1	GYM	BERRAFATO
	G	MWF	2	GYM	MAJER
*	H	MWF	3	GYM	MAJER

P. E. M. 107. Beginning Swimming. Credit 1 hour. For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

LM	TT	8	Y	SPRINGER

P. E. M. 109. Advanced Swimming. Credit 1 hour. For swimmers (ability to swim at least 100 yards). Student must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

MN	TT	9	Y	KRISTUFEK

P. E. M. 112. Individual Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

B	MWF	9	GYM	FORDHAM
C	MWF	10	GYM	SPRINGER
D	MWF	11	GYM	WILDNER
E	MWF	12	GYM	MONTCALM
PQ	TT	11	GYM	MAKSUD
RS	TT	1	GYM	MONTCALM

P. E. M. 113. Double Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

F	MWF	1	GYM	SPRINGER

P. E. M. 114. Apparatus Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	MONTCALM
E	MWF	12	GYM	WILDNER
F	MWF	1	GYM	MONTCALM
G	MWF	2	GYM	MONTCALM
NP	TT	10	GYM	MONTCALM
QR	TT	12	GYM	MONTCALM

P. E. M. 117. Boxing. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	MILLER
D	MWF	11	GYM	KRISTUFEK
E	MWF	12	GYM	MILLER
F	MWF	1	GYM	MAJER
PQ	TT	11	GYM	NEMOTO
QR	TT	12	GYM	WILDNER

P. E. M. 118. Wrestling. Credit 1 hour. Skill, knowledge, attitudes, and conditions.

B	MWF	9	GYM	KRISTUFEK
C	MWF	10	GYM	KRISTUFEK
D	MWF	11	GYM	MAJER
E	MWF	12	GYM	STRNAD
F	MWF	1	GYM	VERSEN
G	MWF	2	GYM	STRNAD
NP	TT	10	GYM	MAJER
PQ	TT	11	GYM	STRNAD
RS	TT	1	GYM	VERSEN

P. E. M. 120. Personal Defense Activities. Credit 1 hour. Skills, knowledge, attitudes and conditions.

A	MWF	8	GYM	NEMOTO
H	MWF	3	GYM	STRNAD
MN	TT	9	GYM	NEMOTO

P. E. M. 122. Individual Athletics. Credit 1 hour. Skills, knowledge, attitudes and conditions.

E	MWF	12	GYM	SPRINGER

P. E. M. 123. Weight Lifting. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

A	MWF	8	GYM	WILDNER
B	MWF	9	GYM	NEMOTO
C	MWF	10	GYM	GEDVILAS
D	MWF	11	GYM	BERRAFATO
E	MWF	12	GYM	RADER
G	MWF	2	GYM	SPRINGER
LM	TT	8	GYM	NEMOTO
NP	TT	10	GYM	WILDNER
QR	TT	12	GYM	KRISTUFEK

P. E. M. 129. Volleyball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

*	G	MWF	2	GYM	FORDHAM
	MN	TT	9	GYM	MAKSUD
	NP	TT	10	GYM	MILLER
	PQ	TT	11	GYM	MAJER
	QR	TT	12	GYM	VERSEN
	RS	TT	1	GYM	WILDNER

P. E. M. 130. Basketball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	RADER
D	MWF	11	GYM	MAKSUD
F	MWF	1	GYM	WILDNER
G	MWF	2	GYM	BERRAFATO

P. E. M. 132. Archery. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

NP	TT	10	GYM	RADER

P. E. M. 136. Badminton. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

NP	TT	10	GYM	SPRINGER
PQ	TT	11	GYM	MILLER
QR	TT	12	GYM	MAKSUD
RS	TT	1	GYM	MAJER

P. E. M. 139. Backyard Sports. Credit 1 hour. Skills, knowledge, and conditions.

*	H	MWF	3	GYM	VERSEN
	RS	TT	1	GYM	STRNAD

P. E. M. 140. Boating and Fishing. Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

PQ	TT	11	GYM	RADER
QR	TT	12	GYM	SPRINGER

P. E. M. 142. Ballroom Dance. Credit 1 hour.

G	MWF	2	AUD	MART

P. E. M. 150. Professional Orientation. Credit 2 hours. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors.

D	WF	11	75	FORDHAM

P. E. M. 151. Beginning Basketball. Credit 2 hours. Introductory skills, rules and strategy. For physical education majors.

A1	MTWTF	8/10	GYM	GEDVILAS
A2	MTWTF	8/10	GYM	RADER

P. E. M. 152. Beginning Football. Credit 2 hours. Introductory skills, rules and strategy. For physical education majors.

A1	MTWTF	8/10	GYM	STRNAD
A2	MTWTF	8/10	GYM	VERSEN

P. E. M. 209. History of Sports. Credit 3 hours. Development of sports and physical education in Europe and United States since 1750. For physical education majors only.

F	MWF	1	75	KRISTUFEK

RECREATION

Recreation 170. Outdoor Recreational Sports. Credit 2 hours. Soccer, touch football, volleyball, softball, speedball.

A	MTWTF	8/10	GYM	BERRAFATO

Recreation 171. Indoor Recreational Sports. Credit 2 hours. Badminton, handball, paddle tennis, squash, racquets, table tennis, weight lifting.

A	MTWTF	8/10	GYM	BERRAFATO

Recreation 174. Camp Counseling. Credit 3 hours. Objectives, administration, techniques, activity programs, evaluation.

E	MWF	12	75	GEDVILAS

PHYSICAL EDUCATION FOR WOMEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

P. E. W. 100. Conditioning Activities. Credit 1 hour.

MN	TT	9	AUD	MART
PQ	TT	11	AUD	MART
E	MWF	12	AUD	PESAVENTO
H	MWF	3	AUD	MART
TU	TT	3	AUD	ANZALONE

P. E. W. 102. Modified Activities. Credit 1 hour. Prescribed recreational sports, relaxation, and exercise. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUD	ANZALONE

P. E. W. 105. Elementary Rhythms. Credit 1 hour. Beginning dance techniques.

B	MWF	9	AUD	CLAYPOOLE
C	MWF	10	AUD	CLAYPOOLE
NP	TT	10	AUD	CLAYPOOLE

P. E. W. 106. Intermediate Rhythms. Credit 1 hour. Intermediate dance techniques, solo and group dance compositions. Prerequisite: Physical Education for Women 105 or consent of instructor.

MN	TT	9	AUD	CLAYPOOLE

P. E. W. 123. Basketball. Credit 1 hour.

D	MWF	11	AUD	PESAVENTO
RS	TT	1	AUD	ANZALONE

P. E. W. 124. Volleyball. Credit 1 hour.

QR	TT	12	AUD	MART

P. E. W. 125. Softball. Credit 1 hour.

F	MWF	1	AUD	MART

P. E. W. 130. Badminton. Credit 1 hour. Personal equipment to be furnished by student.

G	MWF	2	AUD	ANZALONE

P. E. W. 131. Golf. Credit 1 hour. Personal equipment to be furnished by student.

A	MTHF	8	AUD	PESAVENTO

P. E. W. 132. Bowling. Credit 1 hour.

RS	TT	1		MART

P. E. W. 136. Tennis. Credit 1 hour. Personal equipment to be furnished by student.

NP	TT	10	AUD	ANZALONE

P. E. W. 141. Tumbling and Apparatus Stunts. Credit 1 hour. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used.

PQ	TT	11	AUD	ANZALONE

P. E. W. 142. Ballroom Dance. Credit 1 hour.

G	MWF	2	AUD	MART

P. E. W. 144. Elementary Folk Dance. Credit 1 hour.

E	MWF	12	AUD	BARTON

P. E. W. 152. Volleyball and Softball. Credit 1 hour. For Physical Education majors.

C	MTWTF	10	AUD	PESAVENTO

P .E. W. 154. Tumbling and Tennis. Credit 1 hour. For Physical Education majors.

B	MTWTF	9	AUD	PESAVENTO

Dance 160. Beginning Contemporary Dance. Credit 2 hours. For Physical Education majors.

D	MTWTF	11		AUD	CLAYPOOLE

Dance 235. Folk, Square and Social Dance. Credit 2 hours. For Physical Education majors.

F	MTWTF	1		AUD	CLAYPOOLE

Health Education

HEALTH EDUCATION 281. FIRST AID. CREDIT 2 HOURS. Red Cross standard course in first aid.

D	MW	11		AUD	BARTON

PHYSICAL SCIENCE

Phys. Sci. 101. Introduction to the Physical Sciences. Credit 4 hours. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	B	WF	9	204	MELOY
LAB	1	W	10/1	85	MILLER
QUIZ	1	F	11	74	MILLER
LAB	2	W	2/5	85	MILLER
QUIZ	2	M	3	74	MILLER
LAB	3	TH	9/12	85	FARAG
QUIZ	3	TU	9	74	FARAG
LAB	4	M	9/12	85	COWIN
QUIZ	4	W	11	80	COWIN
LAB	5	TH	3/6	85	POTEMPA
QUIZ	5	TU	3	74	POTEMPA

Phys. Sci. 102. Introduction to the Physical Sciences. Credit 4 hours. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101, or Division of General Studies 141.

LEC	M	TT	9	204	MELOY
LAB	11	F	9/12	85	COWIN
QUIZ	11	W	10	74	COWIN
LAB	12	F	1/4	85	FARAG
QUIZ	12	M	1	74	FARAG
LAB	14	M	2/5	85	COWIN
QUIZ	14	F	3	80	COWIN
LAB	15	TU	10/1	85	HEDBERG
QUIZ	15	TH	10	74	HEDBERG

PHYSICS

Physics 101. General Physics (Mechanics, Heat, Sound). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite: Trigonometry.

LEC	X	TU	11	127	STAFF
LEC	Y	TU	1	127	STAFF
QUIZ	C1	MWF	10	113	SILKETT
LAB	C	TH	8/11	117	SILKETT
QUIZ	E1	MWF	12	134	SILKETT.
LAB	E	M	3/6	117	SILKETT
QUIZ	F1	MWF	1	144	LIVERMORE
LAB	F	TU	3/6	117	LIVERMORE
QUIZ	H1	MWF	3	113	LIVERMORE
LAB	H	TH	3/6	117	LIVERMORE

Physics 102. General Physics (Electricity, Magnetism, Light, and Modern Physics). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite: Physics 101.

LEC	X	TH	11	127	STAFF
QUIZ	B1	MWF	9	144	WILBUR
LAB	B	TU	8/11	122	WILBUR
QUIZ	E1	MWF	12	144	WILBUR
LAB	E	TH	3/6	122	WILBUR
QUIZ	G1	MWF	2	134	JOHNSON
LAB	G	TU	3/6	122	JOHNSON

Physics 106. General Physics (Mechanics). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Mathematics 133.

LEC	X	M	10	127	STAFF
LEC	Y	M	1	127	STAFF
QUIZ	B1	WF	9	134	HASLETT
LAB	B	TU	8/11	123	HASLETT
QUIZ	C1	WF	10	134	MORAINE
LAB	C	TH	8/11	123	MORAINE
QUIZ	D1	WF	11	134	MINKLER
LAB	D	TH	11/2	123	MINKLER
QUIZ	E1	WF	12	113	PAPPADEMOS
LAB	E	TH	3/6	123	PAPPADEMOS
QUIZ	F1	WF	1	134	YOUNG
LAB	F	M	3/6	123	YOUNG
QUIZ	G1	WF	2	144	BESS
LAB	G	TU	11/2	123	BESS
QUIZ	M1	TT	9	134	SKADELAND
LAB	M	W	8/11	123	SKADELAND
QUIZ	P1	TT	11	134	SKADELAND
LAB	P	F	12/3	123	SKADELAND
QUIZ	R1	TT	1	134	YOUNG
LAB	R	F	3/6	123	YOUNG

Physics 107. General Physics (Heat, Electricity, Magnetism). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106; credit or registration in Mathematics 143. I.

LEC	X	W	10	127	STAFF
LEC	Y	W	1	127	STAFF
QUIZ	C1	M	10	134	HASLETT
QUIZ	C1	F	10	144	HASLETT
LAB	C	TH	8/11	122	HASLETT
QUIZ	D1	MF	11	144	MORAINE
LAB	D	TU	11/2	122	MORAINE
QUIZ	M1	TT	9	144	MORAINE
LAB	M	F	8/11	122	MORAINE
QUIZ	Q1	TT	12	134	HASLETT
LAB	Q	M	12/3	122	MINKLER
QUIZ	R1	TT	1	144	PAPPADEMOS
LAB	R	W	3/6	122	PAPPADEMOS
QUIZ	T1	TT	3	134	ANDERSON
LAB	T	F	12/3	122	ANDERSON

Physics 108. General Physics (Sound, Light, Modern Physics). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Physics 107 and Mathematics 143. II.

LEC	X	F	10	127	STAFF
LEC	Y	F	1	127	STAFF
QUIZ	C1	MW	10	144	MINKLER
LAB	C	TU	8/11	124	MINKLER
QUIZ	D1	M	11	134	JOHNSON
QUIZ	D1	W	11	144	JOHNSON
LAB	D	TH	11/2	124	JOHNSON
QUIZ	R1	TT	1	113	ANDERSON
LAB	R	M	12/3	124	ANDERSON
QUIZ	T1	TT	3	144	YOUNG
LAB	T	W	3/6	124	YOUNG

Physics 281. Intermediate Atomic Physics. Credit 3 hours. Elementary charged particles, electromagnetic radiation, waves, and particles: hydrogen atom, atomic spectra, and electron distributions: radioactivity, disintegration of nuclei, nuclear energy. Prerequisite: General Physics and Calculus.

LEC	F1	MWF	1	113	CHANDLER

Physics 322. Theoretical Mechanics. Credit 4 hours. Continuation of Physics 321. Motion of a particle under a variable force, central field motion, accelerated reference systems, motion of a particle constraints, rotation of a rigid body in three dimensions, vibrating systems and normal coordinates, generalized coordinates. Prerequisite: Physics 321.

LEC	D1	MWF	11	208	BESS

Physics 341. Electricity and Magnetism. Credit 4 hours. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Prerequisite: Physics 107 and Calculus. I.

LEC	G1	MWF	2	208	MCNEIL
LAB	G	TH	3/6	208	CHANDLER

Physics 342. Electricity and Magnetism. Credit 4 hours. Continuation of Physics 341. Boundary conditions and special methods in boundary value problems; interpretation of dielectric and magnetic properties of matter from the point of view of atomic and crystalline properties; use of complex notation in circuit problems; coupled circuits; non-linear circuits; transmission lines; radiation from antennas; transmission and reflection of electromagnetic waves. Prerequisite: Physics 341.

LEC	B1	MWF	9	208	MCNEIL
LAB	B	M	3/6	208	BESS

POLITICAL SCIENCE

Pol. Sci. 103. Introduction to Political Science. Credit 3 hours. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: Scope and method of political science, constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

E1	MW	12	37	RAKOVE
	F	12	18	

Pol. Sci. 150. American Government: Organization and Powers. Credit 3 hours. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

B1	MWF	9	28	BARBER
D1	M	11	37	RAKOVE
	WF	11	28	
E1	MWF	12	82	BARBER
H1	MWF	3	82	BARBER

Q1	TT	12	21	RAKOVE
	TU	1	21	

Pol. Sci. 151. American Government: Functions. Credit 3 hours. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power, regulation of commerce, communications, and busineess; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

F1	MWF	1	28	RAKOVE

381. American Foreign Relations. Participation in international affairs; presidential initiative; development and organization of the Department of State; diplomatic intercourse; consular service; treaty making power; development of foreign policy. 3 hours. Prerequisite: Six hours of political science.

C1	MW	10	28	BARBER
	F	10	19	

PSYCHOLOGY

Psych. 100. Introduction to Psychology. Credit 4 hours. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

Lecture and quiz sections in this course are coordinate. The quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	B1	WF	9	218	HOWARD
QUIZ	C1	WF	10	21	HOWARD
QUIZ	D1	WF	11	21	V LIPMAN
QUIZ	M1	TT	9	17	HOWARD
QUIZ	N1	TT	10	17	V LIPMAN
QUIZ	P1	TT	11	18	V LIPMAN
LEC	Q1	TT	12	213	E LIPMAN
QUIZ	E1	WF	12	20	V LIPMAN
QUIZ	F1	WF	1	20	TYROLER
QUIZ	G1	WF	2	28	TYROLER
QUIZ	R1	TT	1	37	V LIPMAN
QUIZ	T1	TT	3	17	V LIPMAN

Psych. 135. Statistical Methods in Psychology. Credit 3 hours. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. Prerequisite: Psychology 100.

B1	MWF	9	80	ZACHARIA

Psych. 145. Industrial Psychology. Credit 3 hours. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Credit is not given for both Psych. 145 and Psych. 245 at Urbana. Prerequisite: Psychology 100.

A1	MWF	8	28	HOWARD
P1	TT	11	22	HOWARD
	TU	12	22	HOWARD

Psych. 150. Personality and Human Relations. Credit 3 hours. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Prerequisite: Psychology 100 or equivalent.

LEC	C1	WF	10	218	E LIPMAN
QUIZ	B1	W	9	19	TYROLER
QUIZ	D1	W	11	23	TYROLER
QUIZ	N1	TU	10	20	E LIPMAN

RHETORIC

Rhetoric 100. Freshman Remedial Rhetoric and Composition. No credit. Intensive review of fundamentals, with considerable practice in composition. Open to students who fail the placement test for admission to Rhetoric 101. Students passing this course will be admitted to Rhetoric 101 without further examination.

Admission to sections marked (*) requires consent of the Division of Humanities.

B1	M	9	220	STAR
	WF	9	203	
C1	MWF	10	116	HEGIE
D1	MWF	11	202	HEGIE
E1	MWF	12	202	STAR
E2	MTWTF	12	228	KRSTEIN/HOSKINS
F1	MTWTF	1	228	KRSTEIN/HOSKINS
G1	MWF	2	203	CARLSON
H1	MWF	3	202	SIDNEY
H2	MTWTF	3	228	KRSTEIN/HOSKINS
N1	MTT	10	203	TIMMIS

Q1	M	12	227	LOVE
	TT	12	205	
R1	MTT	1	209	TIMMIS

Rhetoric 101. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

A1	MWF	8	116	COX
B1	MWF	9	201	ATWOOD
B2	MWF	9	202	COX
C1	MWF	10	206	WILLET
C2	MWF	10	202	TERRILL
D1	MWF	11	201	HARRIS
D2	MWF	11	224	TERRILL
D3	M	11	221	STRONKS
	WF	11	209	
D4	MWF	11	229	WILLETT
E1	MWF	12	203	COX
E2	MWF	12	201	HARRIS
F1	MWF	1	202	HEGIE
F2	MWF	1	205	F JOHNSON
G1	MWF	2	209	HARRIS
G2	MWF	2	222	J C JOHNSON
G3	MWF	2	219	TERRILL
G4	MWF	2	202	HEGIE
G5	MWF	2	206	KERWICK
H1	MWF	3	227	J C JOHNSON
H2	MWF	3	201	KERWICK
H3	MWF	3	222	TERRILL
J1	MWF	4	206	J C JOHNSON

M1	MTT	9	203	GRIEST
M2	MTT	9	206	LEONHARD
N1	M	10	223	GRIEST
	TT	10	206	
N2	M	10	222	KARANIKAS
	TT	10	205	
N3	M	10	220	LEONHARD
	TT	10	202	
P1	MTT	11	205	JACKMAN
P2	M	11	211	TIMMIS
	TT	11	202	
Q1	M	12	220	R SMITH
	TT	12	201	
Q2	M	12	222	LEONHARD
	TT	12	203	
Q3	MTT	12	116	NICHOLAS
R1	MTT	1	201	KARANIKAS
R2	MTT	1	203	GRIEST
R3	M	1	223	S MILLER
	TT	1	215	
T1	MTT	3	203	TIMMIS

Rhetoric 102. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	201	WEISS
A2	MWF	8	203	STAR
B1	MWF	9	229	I MILLER
B2	MWF	9	205	CHILLAG
B3	MWF	9	211	DAVIS
B4	M	9	221	VEST
	WF	9	206	

C1	M	10	221	I MILLER
	WF	10	203	
C2	M	10	226	WEISS
	WF	10	201	
C3	MWF	10	229	PEYTON
C4	MWF	10	211	ATWOOD
C5	MWF	10	209	CHILLAG
D1	M	11	223	SIDNEY
	WF	11	116	
D2	M	11	222	KERWICK
	WF	11	226	
D3	M	11	227	CARLSON
	WF	11	94	
D4	M	11	226	CHILLAG
	WF	11	205	
E1	MWF	12	211	CASSELL
E2	MWF	12	229	I MILLER
E3	M	12	226	DAVIS
	WF	12	116	
E4	M	12	223	PEYTON
	WF	12	206	
F1	M	1	224	STAR
	WF	1	116	
F2	M	1	220	DAVIS
	WF	1	201	
F3	M	1	222	SIDNEY
	WF	1	209	
G1	MWF	2	221	SIDNEY
G2	MWF	2	211	CASSELL

G3	MWF	2	201	PEYTON
G4	MWF	2	220	CHILLAG
H1	MWF	3	229	CARLSON
H2	MWF	3	211	PEYTON
J1	MWF	4	223	CASSELL
J2	MWF	4	202	CARLSON
L1	MTT	8	205	LOVE
L2	MTT	8	206	FRIEND
M1	M	9	214	FRIEND
	TT	9	216	
M2	MTT	9	209	MACKIN
N1	MTT	10	201	GALLAGHER
N2	M	10	227	MACKIN
	TT	10	209	
N3	TT	10	211	RUNYAN
	F	10	213	
P1	TTF	11	203	JORDAN
P2	MTT	11	209	FRIEND
P3	M	11	203	LOVE
	TF	11	201	
P4	MTT	11	206	NICHOLAS
P5	TTF	11	211	BLUM
P6	TT	11	226	SCHILLER
	F	11	206	
Q1	MTT	12	209	FRIEND
Q2	M	12	221	MACKIN
	TT	12	202	
Q3	MTT	12	206	GALLAGHER
R1	MTT	1	206	GALLAGHER

R2	TT	1	205	JORDAN
	F	1	206	
R3	TT	1	216	RUNYAN
	F	1	211	
T1	MTT	3	209	NICHOLAS
T2	MTT	3	221	S MILLER
U1	MTT	4	211	S MILLER
U2	TTF	4	201	SCHILLER
U3	TTF	4	203	BLUM

Rhetoric 133. Principles of Composition. Credit 3 hours. Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

H1	MWF	3	206	RUDIN

Rhetoric 143. Intermediate Expository Writing. Credit 3 hours. Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

F1	M	1	221	RUDIN
	WF	1	203	

Rhetoric 144. Narrative Writing. Credit 3 hours. Practice in description, narrative sketches, stories. Prerequisite: Rhetoric 101 and 102; sophomore standing.

E1	M	12	224	RUDIN
	WF	12	209	

Rhetoric 151. Business Letter Writing. Credit 3 hours. Study of the correspondent's problems in business and practice in writing letters, with emphasis on organization, persuasion, and presentation from the reader's point of view. For the student whose career will require competence in writing letters. Prerequisite: Rhetoric 101 and 102.

C1	MWF	10	205	OLEKSY
E1	MWF	12	205	OLEKSY
G1	MWF	2	205	OLEKSY
H1	MWF	3	205	OLEKSY
P1	MTT	11	94	R SMITH

Soc. Sci. 111. The Individual in Society. Credit 4 hours. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	MW	2	218	SPAETH
QUIZ	F1	WF	1	16	WARREN
QUIZ	H1	MW	3	97	SPAETH
QUIZ	P1	TT	11	13	WARREN
QUIZ	N1	TT	10	16	WARREN

Soc. Sci. 112. Bases of American Life. Credit 4 hours. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	218	BILL
QUIZ	C1	MWF	10	82	BILL
QUIZ	F1	MWF	1	82	BILL

Soc. Sci. 113. World Patterns and World Problems. Credit 4 hours. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Students with 95 or more credit hours receive only 3 hours credit.

LEC	B1	M	9	218	COLBY
QUIZ	F1	M	1	13	CUTSHALL
		WF	1	14	
QUIZ	G1	MWF	2	14	CUTSHALL
QUIZ	M1	TTF	9	14	COLBY
QUIZ	Q1	MTT	12	14	COLBY

Soc. Sci. 116. Family Living. Credit 4 hours. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

LEC	D1	WF	11	218	STAFF
QUIZ	B1	WF	9	20	KLASSEN
QUIZ	P1	TT	11	38	LIPMAN

SOCIOLOGY

Sociol. 100. Introduction to Sociology. Credit 3 hours. Introductory anaylsis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Prerequisite: Sophomore standing.

A1	MWF	8	24	CORLEY
G1	MWF	2	82	KLASSEN
Q1	TT	12	17	CORLEY
	TU	1	17	CORLEY
H1	MWF	3	28	KLASSEN

Sociol. 140. Social Control. Credit 3 hours. The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

B1	MW	9	37	CORLEY
	F	9	21	CORLEY

Sociol. 276. Sociology of the City. Credit 3 hours. Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	76	KLASSEN
E2	MWF	12	251	CORLEY

SPANISH

Spanish 101. Elementary Spanish. Credit 4 hours. For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102

B1	TWTF	9	227	MARSH
C1	TWTF	10	227	TORT
E1	TWTF	12	227	MARSH
F1	TWTF	1	227	BLANCO/GONZALES

Spanish 102. Elementary Spanish. Credit 4 hours. Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

A1	TWTF	8	225	MARSH
B1	TWTF	9	221	TORT
C1	TWTF	10	223	MARSH
H1	TWTF	3	225	BLANCO/GONZALES

Spanish 103. Intermediate Spanish. Credit 4 hours. Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

C1	TWTF	10	225	SANCHEZ
F1	TWTF	1	225	TORT

Spanish 104. Intermediate Spanish. Credit 4 hours. Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

B1	TWTF	9	225	SANCHEZ
D1	TWTF	11	227	TORT

Spanish 113. Elementary Composition and Conversation. Credit 2 hours. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

P1	TT	11	225	SANCHEZ

Spanish 202. Introduction to Spanish American Literature. Credit 3 hours. Reading of representative authors of Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

D1	MWF	11	225	SANCHEZ

SPEECH

Group Remedial Speech. No credit hours. Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Service, Room 303.

P1	TT	11	300	RIGLER
E1	WF	12	300	RIGLER

Speech 101. Principles of Effective Speaking. Credit 3 hours. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

B1	MWF	9	216	ARMOLD
C1	MWF	10	217	ARMOLD
D1	MWF	11	217	DEGRYSE
E1	MWF	12	217	DEGRYSE
E2	MWF	12	216	PITT
F1	MWF	1	216	CREWS
F2	MWF	1	217	PITT
G1	MWF	2	214	KUNDRAT
G2	MWF	2	217	PITT
H1	MWF	3	216	CREWS
H2	MWF	3	217	KUNDRAT
J1	MWF	4	217	DEGRYSE

M1	MTT	9	116	HOVDE
N1	M	10	225	GOULSON
	TT	10	217	
P1	MTT	11	116	HOVDE
P2	MTT	11	216	CREWS
Q1	M	12	225	GOULSON
	TT	12	217	
R1	MTT	1	116	HOVDE

Speech 105. Voice and Articulation. Credit 2 hours. A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

B1	MWF	9	217	HOSKINS
C1	M	10	224	HOSKINS
	WF	10	216	

Speech 107. Parliamentary Procedure. Credit 2 hours. Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

N1	TT	10	116	HOVDE

Speech 111. Business and Professional Speaking. Credit 2 hours. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

Q1	TT	12	216	PITT

Speech 141. Oral Interpretation of Literature. Credit 3 hours. Principles of interpretation, analysis, and oral reading of prose literature, dramatic literature, and verse. Students with 95 or more credit hours receive only 1 hour credit.

A1	MWF	8	216	ARMOLD
N1	MTT	10	216	CREWS
G1	MWF	2	216	CREWS

Speech 161. Fundamentals of Acting. Credit 3 hours. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Credit or commitment registration in Speech 141.

R1	M	1	225	GOULSON
	TT	1	217	

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. Analytical Mechanics (Statics). Credit 2 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic states, forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. Prerequisite: Registration in Mathematics 143.

R1	TT	1	110	COE

T. A. M. 151. Analytical Mechanics (Statics). Credit 3 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Prerequisite: Registration in Mathematics 143.

C1	MWF	10	110	COBB
F1	MWF	1	110	WIESINGER

T. A. M. 154. Analytical Mechanics (Statics and Dynamics). Credit 4 hours. A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. Prerequisite: Registration in Mathematics 143.

B1	MWTF	9	113	GRAF
J1	MTWF	4	113	WIESINGER

T. A. M. 156. Analytical Mechanics (Statics and Dynamics). Credit 5 hours. A combination of Theoretical and Applied Mechanics 150 and 211. Prerequisite: Registration in Mathematics 143.

E1	MTWTF	12	110	GRAF

T. A. M. 171. Elements of Mechanics (Statics). Credit 3 hours. Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Prerequisite: Mathematics 123.

G1	MWF	2	110	COBB

T. A. M. 172. Strength of Materials. Credit 3 hours. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Prerequisite: Theoretical and Applied Mechanics 171.

G1	MWF	2	113	BERATAN

T. A. M. 211. Analytical Mechanics (Dynamics). Credit 3 hours. Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

B1	MWF	9	110	COBB
J1	MWF	4	110	GRAF

T. A. M. 221. Elementary Mechanics of Deformable Bodies. Credit 3 hours. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

A1	MWF	8	113	PABARCIUS
H1	MWF	3	110	WIESINGER

T. A. M. 223. Mechanical Behavior of Solids. Credit 1 hour. Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	W	9/11	61	BERATAN
B	F	10/12	61	COE
C	TH	12/2	61	STANLEY
D	TU	8/10	61	WIESINGER

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TIME TABLE

FIRST SEMESTER, 1960-1961

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Chicago Undergraduate Division
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TABLE OF CONTENTS

Pre-registration Advisement Schedule..... 2
Instructions for Registration..... 3
Registration Schedule, First Semester..... 5
Schedule of Tuition and Fees..... 6
Calendar, First Semester..... 7
Chicago Undergraduate Division Calendar..... 8
Urbana Calendar..... 9
Final Examinations Schedule..... 10
How to Read This Timetable..... 11
Accountancy..... 12
Anthropology..... 13
Architecture..... 14
Art..... 15
Biological Sciences..... 17
Business Law..... 20
Chemistry..... 21
Civil Engineering..... 28
Economics..... 28
Education..... 30
Electrical Engineering..... 31
English..... 31
French..... 34
General Engineering..... 35
Geography..... 37
Geology..... 38
German..... 39
History..... 40
Humanities..... 42
Hygiene..... 42
Management..... 43
Marketing..... 43
Mathematics..... 43
Mechanical Engineering..... 49
Military Sciences and Tactics..... 50
Music..... 50
Philosophy..... 51
Physical Education for Men..... 52
Recreation..... 56
Physical Education for Women..... 57
Physical Sciences..... 59
Physics..... 60
Political Science..... 63
Psychology..... 64
Rhetoric..... 65
Social Sciences..... 72
Sociology..... 73
Spanish..... 74
Speech..... 75
Theoretical and Applied Mechanics..... 77

C
IZ u3 It
1960/61
pt.1

PRE-REGISTRATION ADVISEMENT SCHEDULE
FIRST SEMESTER 1960-61

PLACE: Second Floor, Lounge, East End

COMMERCE AND ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, September 12	1 p.m. - 4 p.m.
F - K	Tuesday, September 13	9 a.m. - 12 noon
L - Q	Tuesday, September 13	1 p.m. - 4 p.m.
R - Z	Wednesday, September 14	9 a.m. - 12 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS

Monday, September 12

A	- BRZ.....	1 p.m.
BS	- DON.....	2 p.m.
DOO	- GRAM.....	3 p.m.

Tuesday, September 13

GRAN	- JOH..... 9 a.m.		NOS	- ROC.....	1 p.m.
JOI	- MAC..... 10 a.m.		ROD	- SUL.....	2 p.m.
MAD	- NOR..... 11 a.m.		SUM	- Z.....	3 p.m.

NEW STUDENTS (Liberal Arts and Sciences only)
Wednesday, September 14

A	- COK..... 9 a.m.		KLF	- NEK.....	1 p.m.
COL	- GN..... 10 a.m.		NEL	- SMH.....	2 p.m.
GO	- KLE..... 11 a.m.		SMI	- Z.....	3 p.m.

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

No. 2 DEAN'S PROGRAM CARD

4. After the No. 2 card has been made out by your adviser and he has signed it, write your address and telephone number on the front of the No. 2 Dean's Program Card. Turn card over and complete the back in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in the box provided (further indicated by arrows) but do not write your name on these cards.

No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and left margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with the program on the No. 2 Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2 and then proceed to Station No. 3 for class card check.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

11. Submit all cards to the fee card clerks at Station 4 and obtain a No. 6 Fee Assessment Card and a No. 7 Identification Card. Write your name and address on the No. 7 Identification Card.

12. All veterans stop at Station 5.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 4, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to a clerk at Station 7. Your cards should be presented in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in Military Science, report to Station 8.

16. You are now ready to pay your fees. Present your banded group of cards No. 1, 2, 3, and 5 cards, and No. 6, 7, and 4, (if applicable) to one of the cashiers. The banded group, No. 7 Identification Card, and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to a clerk at Station 12. The clerk at the station will return to you your Identification Card. This No. 7 Identification Card is very necessary and must be presented in order to participate in many University functions.

18. From this station proceed to the various stations for your insurance policy, University locker, and other University activities.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

REGISTRATION SCHEDULE
First Semester, Fall, 1960 - 61

PLACE: Second Floor, Lounge, East End

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, September 16, 1960, will be assessed a late registration fee of $5.00.

A - C	Thursday, September 15	9:30 a.m.
D - H	Thursday, September 15	8:30 a.m.
I - N	Thursday, September 15	10:30 a.m.
O - R	Thursday, September 15	11:30 a.m.
S - Z	Thursday, September 15	1:30 p.m.

NEW STUDENTS

A - B	Friday, September 16	8:30 a.m.
C - D	Thursday, September 15	2:30 p.m.
E - G	Friday, September 16	9:30 a.m.
H - K	Thursday, September 15	3:30 p.m.
L - MIL	Friday, September 16	2:30 p.m.
MIM - P	Friday, September 16	1:30 p.m.
Q - SO	Friday, September 16	11:30 a.m.
SP - Z	Friday, September 16	10:30 a.m.

Students registering for less than 12 semester hours will register at 2:30 p.m., Friday, September 16.

All University offices will be closed on Saturday, September 17, 1960.

Late Registration will begin on Monday, September 19, 1960.

Instruction will begin on Monday, September 19, 1960.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more..... $ 75.00
(Eight hours or less pay tuition at the rate of $6.00 a semester hour).

Non-residents of Illinois taking nine hours or more..... $250.00
(Eight hours or less pay tuition at the rate of $20.00 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours..... $ 8.00
(Less than five hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours..... $ 12.00
(Less than nine hours $6.00 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours..... $ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DATE OF REGISTRATION

GENERAL DEPOSIT:

All new students, and all former students who were not in attendance at the Chicago Undergraduate Division during the second semester 1959/60 or the summer session 1960 must pay a General Deposit fee of..... $ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed the first day of late registration, Monday, September 19, 1960.

Late registration fee..... $ 5.00

CHICAGO UNDERGRADUATE DIVISION
CALENDAR

First Semester, Fall, 1960

Tues., Sept. 6 - Wed., Sept. 14	Orientation Period.
Thurs., Sept. 15 - Fri., Sept. 16	Registration (Students registering for less than 12 hours report at 2:30 p.m., Friday, Sept. 16, for registration).
Mon., Sept. 19	Instruction Begins.
Tues., Sept. 20, 9:30 a.m.	Changes to adjust conflicts in program.
Thurs., Sept. 22, 1:00 p.m.	Earliest time at which program changes may be made for personal convenience.
Fri., Sept. 30, 4:00 p.m.	Latest date of withdrawal for rebate in full.
Fri., Oct. 21	Chicago Undergraduate Division opened, 1946.
Fri., Nov. 4, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals.
Fri., Nov. 11, 12:00 noon	Mid-semester grades are due.
Fri., Nov. 11, 4:00 p.m.	Latest date of withdrawal for rebate of one-half fees.
Wed., Nov. 23, 6:00 p.m.	Thanksgiving Vacation Begins.
Mon., Nov. 28, 8:00 a.m.	Thanksgiving Vacation Ends.
Sat., Dec. 3	Illinois Day (State admitted to Union, 1818) Not a holiday.
Thurs., Dec. 15	Students withdrawing on or after this date must petition for readmission.
Fri., Dec. 16, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals.
Fri., Dec. 16, 6:00 p.m.	Christmas Vacation Begins.
Tues., Jan. 3, 8:00 a.m.	Christmas Vacation Ends.
Fri., Jan. 20 - Fri., Jan. 27	Semester Examinations.

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

ACADEMIC CALENDAR 1960-61

First Semester (Fall 1960)

Sept. 6, Tues. - Sept. 14, Wed.	Orientation Period
Sept. 15, Thurs. - Sept. 16, Fri.	Registration
Sept. 19, Mon.	Instruction begins
Nov. 23, Wed., 6 p.m.	Thanksgiving Vacation begins
Nov. 28, Mon., 8 a.m.	Thanksgiving Vacation ends
Dec. 3, Sat.	Illinois Day (State admitted to Union, 1818, not a holiday)
Dec. 16, Fri., 6 p.m.	Christmas Vacation begins
Jan. 3, Tues., 8 a.m.	Christmas Vacation ends
Jan. 20, Fri. - Jan. 27, Fri.	Semester Examinations

Second Semester (Spring 1961)

Feb. 3, Fri. - Feb. 8, Wed.	Orientation Period
Feb. 9, Thurs. - Feb. 10, Fri.	Registration
Feb. 13, Mon.	Instruction begins
March 2, Thurs.	University Day (University opened, 1868 - not a holiday)
March 30, Thurs., 6 p.m.	Easter Vacation begins
April 5, Wed., 8 a.m.	Easter Vacation ends
May 12, Fri.	Honors Day
May 30, Tues.	Memorial Day (Holiday)
June 2, Fri. - June 9, Fri.	Semester Examinations

Summer Session 1961

June 23, Fri.	Registration
June 26, Mon.	Instruction begins
July 4, Tues.	Independence Day (Holiday)
Aug. 18, Fri.	Summer Session Examinations

UNIVERSITY OF ILLINOIS
URBANA

ACADEMIC CALENDAR 1960-61

First Semester (Fall 1960)

Sept. 6, Tues. - Sept. 9, Fri.	Entrance Examinations
Sept. 12, Mon. - Sept. 17, Sat.	Freshman Week and Registration
Sept. 19, Mon.	Instruction begins
Nov. 22, Tues., 5 p.m.	Thanksgiving Vacation begins
Nov. 28, Mon., 8 a.m.	Thanksgiving Vacation ends
Dec. 3, Sat.	Illinois Day (State admitted to the Union, 1818)
Dec. 17, Sat., 1 p.m.	Christmas Vacation begins
Jan. 3, Tues., 8 a.m.	Christmas Vacation ends
Jan. 19, Thurs.	Study Day, classes dismissed
Jan. 20, Fri. - Jan. 28, Sat.	Semester Examinations

Second Semester (Spring 1961)

Jan. 31, Tues. - Feb. 3, Fri.	Entrance Examinations
Feb. 6, Mon. - Feb. 8, Wed.	Registration
Feb. 9, Thurs.	Instruction begins
Mar. 2, Thurs.	University Day (University opened, 1868)
Mar. 29, Wed., 5 p.m.	Spring Vacation begins
Apr. 4, Tues., 8 a.m.	Spring Vacation ends
May 5, Fri.	Honors Day (Classes dismissed at noon)
May 30, Tues.	Memorial Day (Holiday)
May 30, Tues.	Study Day
May 31, Wed. - June 8, Thurs.	Semester Examinations
June 17, Sat.	Commencement Exercises

Summer Session 1961

June 6, Tues. - June 9 Fri.	Entrance Examinations
June 19, Mon.	Registration
June 20, Tues.	Instruction begins
July 4, Tues.	Independence Day (Holiday)
Aug. 11, Fri. - Aug. 12, Sat.	Summer Session Examinations

FINAL EXAMINATIONS SCHEDULE, I 1960-61
January 20 through January 27, 1961

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes Meeting at	Classes having at least ONE session on Wednesday will be examined at: 9 a.m. to 11 a.m.	Classes having NO session on Wednesday will be examined at: 12 noon to 2 p.m.	All classes meeting at 8, 2, or 4 will be examined at: 3 p.m. to 5 p.m.
8 a.m.	_____	_____	Friday, Jan. 27
9 a.m.	Thursday, Jan. 26	Thursday, Jan. 26	_____
10 a.m.	Friday, Jan. 27	Friday, Jan. 27	_____
11 a.m.	Friday, Jan. 20	Friday, Jan. 20	_____
12 noon	Monday, Jan. 23	Monday, Jan. 23	_____
1 p.m.	Tuesday, Jan. 24	Tuesday, Jan. 24	_____
2 p.m.	_____	_____	Wednesday, Jan. 25
3 p.m.	Wednesday, Jan. 25	Wednesday, Jan. 25	_____
4 p.m.	_____	_____	Thursday, Jan. 26

Combined Section examinations from 3 p.m. to 5 p.m. on:

Friday, January 20

Monday, January 23

Tuesday, January 24

HOW TO READ THIS TIMETABLE

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 1). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

LEGEND FOR SECTION LETTERS*

Hour	MWF, MTWTF, TWTF	TT, MTT, TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

The information contained in the various columns under each course description is:

Column 1: Type of section--lecture, laboratory, quiz. (This column will not appear in all instances.)

Column 2: Section number. (See Legend above.)

Column 3: Day(s) of the week on which the section meets.

Column 4: Hour(s) of the day at which the section meets.

Column 5: Room(s) in which the section meets.

Column 6: Instructor(s) of the section.

ACCOUNTANCY

Accy. 101. Principles of Accounting. Credit 3 hours. Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	38	FOX
B2	MWF	9	17	OSSMAN
C1	MWF	10	22	KABBES
C2	MWF	10	23	HEDISH
D1	MWF	11	19	MALINOSKY
E1	MWF	12	24	ANDREWS
E2	MWF	12	20	LIPKIN
F1	MWF	1	21	KABBES
F2	MWF	1	24	OSSMAN
G1	MWF	2	21	KABBES
G2	MWF	2	38	ANDREWS
H1	MWF	3	23	LIPKIN
H2	MWF	3	236	OSSMAN
M1	MTT	9	19	LIPKIN
N1	TTF	10	20	ANDREWS
Q1	MTT	12	38	FOX
R1	MTT	1	38	FOX
T1	MTT	3	20	HEDISH
U1	MTT	4	20	HEDISH

Accy. 105. Accounting Procedure. Credit 3 hours. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

C1	MWF	10	21	SCHNEIDER
E1	MWF	12	21	HEDISH
E2	MWF	12	19	OSSMAN
M1	MTT	9	20	ANDREWS
P1	TTF	11	20	LIPKIN

Accy. 106. Elementary Cost Accounting. Credit 3 hours. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. Prerequisite: One year of accountancy; sophomore standing.

D1	MWF	11	21	SCHNEIDER
G1	MWF	2	20	SCHNEIDER
N1	MTT	10	19	MALINOSKY
R1	TTF	1	19	MALINOSKY

Accy. 108. Intermediate Accounting. Credit 3 hours. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	22	KABBES
F1	MWF	1	20	SCHNEIDER
G1	MWF	2	19	MALINOSKY

ANTHROPOLOGY

Anthrop. 102. Introduction to Anthropology: The Origin of Man and Culture. Credit 4 hours. An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology.

E1	MTW	12	37	WARREN
	TH	12	13	
J1	MTWT	4	28	WARREN

Arch. 101. Introduction to Architecture. Credit 3 hours. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107.

LECT	C	W	10	251
LAB	A	MTTF	8/10	241
LAB	B	MTTF	10/12	241
LAB	C	MTTF	3/5	241

Arch. 113. History of Ancient Architecture. Credit 2 hours. A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Prerequisite: Architecture 131 or sophomore standing.

LECT	N	TT	11	251

Arch. 131. Architectural Deesign. Credit 3 hours. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Sophomore standing. Arch. 101, credit or registration in G.E. 108, and registration in Arch. 141.

LECT	R	W	2	251
LAB	A	MF	8/11	241
		W	9/11	241
LAB	B	TT	8/11	241
		W	9/11	241
LAB	C	TT	3/6	241
		W	3/5	241

Arch. 132. Architectural Design. Credit 3 hours. Continued study of the fundamentals of architectural design. Prerequisite: Architecture 131.

LEC	D	W	11	251
LAB	A	MF	8/11	242
		W	9/11	242

Arch. 141. Materials and Methods of Construction I. Credit 2 hours. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials: Prerequisite: Registration in Architecture 131.

	S	MF	2	251

Arch. 142. Materials and Methods of Construction II. Credit 2 hours. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Prerequisite: Architecture 141.

P	MF	11	251

Arch. 214. History of Medieval Architecture. Credit 3 hours. A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Prerequisite: Architecture 113 or consent of instructor.

F	MWF	1	251

233. Architectural Design. Continued study of architectural planning with emphasis on small structures. I, II; 3. Prerequisite: Architecture 132; credit or registration in Theoretical and Applied Mechanics 150 or 171; registration in Architecture 241.

A	MWF	8/11	242
B	MWF	3/6	242

241. Materials and Methods of Construction, III. Semi-fire resistive construction; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I, II; 2. Prerequisite: Architecture 142; registration in Architecture 233.

R	TT	1	251

ART

Art 111. Survey of Art History. Credit 3 hours. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance.

B	MWF	9	251

Art 115. Art Appreciation. Credit 3 hours. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students.

J	MWF	4	251

Art 117. Drawing I. Credit 3 hours. Theory and practice in the elements of drawing.

A	MWF	10/1	84

Art 118. Drawing II. Credit 2 hours. Continuation of Art 117. Prequisite: Art 117.

A	TT	3/6	83

Art 119. Design. Credit 2 hours. Theory and practice in the elements of design.

A	TT	11/2	244

Art 120. Design. Credit 3 hours. Continuation of Art 119. Prerequisite: Art 119.

A	MWF	3/6	244

Art 181. Freehand Drawing. Credit 2 hours. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture.

A	MWF	8/10	83
B	MWF	10/12	83
C	MWF	12/2	83
D	MWF	2/4	83
E	MWF	4/6	83
F	MWF	8/10	84
H	MWF	4/6	84

Art 182. Freehand Drawing. Credit 2 hours. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Prerequisite: Art 181.

A	TT	11/2	91
B	TT	3/6	91

Art 183. Freehand Drawing. Credit 2 hours. Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art 182.

A	TT	8/11	91
B	MF	8/11	91
C	MF	3/6	91

Art 184. Freehand Drawing. Credit 2 hours. Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art 183.

A	TT	8/11	83

Art 281. Freehand Drawing. Credit 2 hours. Arrangement of form and color, rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184.

A	TT	8/11	84
B	TT	3/6	84

BIOLOGICAL SCIENCES

Biology 101. Fundamentals of Biology. Credit 4 hours. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	B	WF	9	213	GLASSMAN
LAB	1	TT	8/10	46	PRESLEY
LAB	2	TT	10/12	46	CLAAR
LAB	3	TT	12/2	46	
LAB	4	TT	3/5	46	KRISHNA
LAB	5	MF	2/4	48	
LAB	6	WF	12/2	48	CLAAR
LEC	R	TT	1	213	PRESLEY
LAB	7	TT	10/12	48	PRESLEY
LAB	8	M	10/12	48	
		F	10/12	46	
LAB	9	MW	12/2	43	BOND
LAB	10	MF	4/6	48	SCUDDER
LAB	11	WF	8/10	46	PRESLEY
LAB	12	WF	12/2	45	SARKISSIAN

LEC	C	WF	10	213	SPIRAKIS
LAB	13	MW	2/4	46	NEWELL
LAB	14	MW	4/6	46	BOND
LAB	15	MW	12/2	46	KRISHNA
LAB	16	MW	4/6	43	KRISHNA
LAB	17	TT	8/10	43	SARKISSIAN
LAB	18	TT	10/12	43	NEWELL.
LEC	Q	TT	12	213	NEWELL
LAB	19	MW	10/12	46	BOND
LAB	20	TT	8/10	45	DEMBSKI
LAB	21	M	8/10	46	
		F	8/10	45	
LAB	22	TT	3/5	48	BOND
LAB	23	WF	8/10	48	SPIRAKIS
LAB	24	M	12/2	48	SCUDDER
		F	12/2	46	
LEC	P	TT	11	213	MADISON
LAB	25	TT	12/2	48	BOND
LAB	26	W	2/4	48	CLAAR
		F	2/4	46	
LAB	27	TT	12/2	45	SARKISSIAN
LAB	28	TT	12/2	43	CLAAR
LAB	29	MW	10/12	43	KRISHNA

Biology 102. Fundamentals of Biology, Continued. Credit 4 hours. Application of biological principles to the living world. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

LEC	P	TT	11	217	GLASSMAN
LAB	45	TT	12/2	41	SCUDDER
LAB	46	WF	10/12	41	DEMBSKI
LAB	47	MW	12/2	41	NEWELL
LAB	48	WF	2/4	41	SARKISSIAN
LAB	49	TT	3/5	41	SARKISSIAN

Biology 111. General Botany. Credit 4 hours. The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor.

LEC	N	TT	10	217	ROUFFA
LAB	50	TT	8/10	48	ROUFFA
LAB	51	WF	10/12	48	GLASSMAN

BIOLOGY 120. SURVEY OF PLANT KINGDOM. CREDIT 4 HOURS. A study, at an elementary level, of the life histories of plants representative of algae, fungi, ferns, and seed plants. Prerequisite: Biology 111 or Biology 101 with a grade of "A" or "B".

LEC	B	MW	9	45	ROUFFA
LAB	54	MW	10/12	45	ROUFFA

Biology 121. Microbiology. Credit 4 hours. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 102 or consent of instructor.

LEC	L	TT	8	23	MADISON
LAB	60	MW	8/10	41	MADISON

Biology 131. General Zoology. Credit 4 hours. A survey of the animal kingdom. The structures, functions, life history, adaptations, classification and evolutionary relationships of animals. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	E	WF	12	217	SHOMAY
LAB	70	TT	10/12	45	SHOMAY

Biology 132. Comparative Vertebrate Anatomy. Credit 5 hours. Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	C	MWF	10	217	SHANK
LAB	72	MWF	8/10	43	DEMBSKI
LAB	73	MWF	2/4	43	SHANK
LAB	74	TT	3/6	43	SHOMAY

Biology 141. Vertebrate Physiology. Credit 4 hours. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prequisite: Biology 101.

LEC	L	TT	8	24	PICKETT/SPIRAKS
LAB	80	TH	9/12	41	SPIRAKIS
QUIZ	80	TU	9	41	SPIRAKIS

Biology 333. Vertebrate Embryology. Credit 5 hours. The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 132, junior standing.

LEC	F1	MWF	1	217	SANGSTER
LAB	78	MWF	2/4	45	SANGSTER
LAB	79	TT	3/6	45	SCUDDER

BUSINESS LAW

Business Law 100. Basic Principles of Business Law. Credit 3 hours. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

C1	MWF	10	38	FOX

Chem. 101. General Chemistry. Credit 5 hours. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Students with 9$ or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

Lecture and laboratory-quiz sections in this course are coordinate. The laboratory-quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	N	TT	10	205	STEINER
LAB	1	MWF	8/10	53	PARE
QUIZ	1	TT	8	74	PARE
LAB	2	MWF	10/12	53	CASTEN
QUIZ	2	TT	11	80	CASTEN
LAB	3	MWF	1/3	53	LOTHIAN
QUIZ	3	TT	1	75	LOTHIAN
LAB	4	MWF	3/5	53	HERZOG
QUIZ	4	TT	4	75	HERZOG
LAB	5	MWF	12/2	53	STEINER/FARAG
QUIZ	5	TT	12	80	STEINER

LEC	H	WF	3	205	STEINER
LAB	6	TT	11/2	53	HEDBERG
QUIZ	6	MF	1	75	HEDBERG
LAB	7	MWF	9/11	53	CARBONARO
QUIZ	7	TT	9	80	CARBONARO
LAB	8	MWF	10/12	53	TRAXLER
QUIZ	8	TT	3	74	TRAXLER
LAB	9	MWF	1/3	53	SEABRIGHT
QUIZ	9	TT	11	76	SEABRIGHT
LAB	10	MWF	4/6	53	
QUIZ	10	TT	4	80	

Chem. 102. General Chemistry. Credit 3 hours. For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Students with 95 or more credit hours receive only 2 hours credit. Prequisite: One unit of entrance credit in chemistry or equivalent.

Lecture and laboratory-quiz sections in this course are coordinate. The laboratory-quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	C	WF	10	205	MUELLER
LAB	11	TU	8/10	53	MUELLER
QUIZ	11	WF	8	74	MUELLER
LAB	12	F	12/2	53	MUELLER
QUIZ	12	TT	10	75	MUELLER
LAB	13	W	1/3	53	MUELLER
QUIZ	13	TT	12	76	MUELLER
LAB	14	M	2/4	53	JOHNSON
QUIZ	14	WF	3	76	JOHNSON
LAB	15	M	9/11	53	LOTHIAN
QUIZ	15	WF	8	75	LOTHIAN
LAB	16	F	2/4	53	CARBONARO
QUIZ	16	MW	2	80	CARBONARO
LAB	17	TH	9/11	53	TRAXLER
QUIZ	17	WF	9	76	TRAXLER
LAB	18	TU	12/2	53	JOHNSON
QUIZ	18	WF	12	75	JOHNSON

LEC	M	TT	9	213	SCHRAGE
LAB	19	M	1/3	53	HERZOG
QUIZ	19	WF	11	74	HERZOG
LAB	20	TH	12/2	53	CASTEN
QUIZ	20	WF	4	74	CASTEN

LAB	21	W	9/11	53	LOTHIAN
QUIZ	21	MW	12	74	LOTHIAN
LAB	22	F	1/3	53	PARE
QUIZ	22	MW	2	75	PARE
LAB	23	TH	10/12	53	LOTHIAN
QUIZ	23	MF	2	74	SCHRAGE
LAB	24	W	1/3	50	DAFLER
QUIZ	24	TT	10	80	DAFLER
LAB	25	M	10/12	50	SEABRIGHT
QUIZ	25	WF	3	75	SEABRIGHT

Chem. 103. General Chemistry. Credit 4 hours. For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 103 or 112.

Lecture and laboratory-quiz sections in this course are coordinate. The laboratory-quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	E	WF	12	205	BACHRACH
LAB	27	MW	8/10	50	SACKHEIM
QUIZ	27	TT	8	75	SACKHEIM
LAB	28	TT	9/11	50	SACKHEIM
QUIZ	28	WF	10	74	SACKHEIM
LAB	29	MW	1/3	50	TRAXLER
QUIZ	29	TT	11	75	TRAXLER
LAB	30	TT	10/12	50	BACHRACH
QUIZ	30	WF	10	76	BACHRACH
LAB	31	MF	2/4	50	CASTEN
QUIZ	31	MW	1	80	CASTEN
LAB	32	WF	8/10	50	BACHRACH
QUIZ	32	TT	8	80	BACHRACH

LAB	33	TT	9/11	50	HERZOG
QUIZ	33	WF	1	74	HERZOG
LEC	T	TT	3	205	KLAAS
LAB	34	WF	10/12	50	SEABRIGHT
QUIZ	34	MF	9	80	SEABRIGHT
LAB	35	TT	12/2	50	CARBONARO
QUIZ	35	MW	3	80	CARBONARO
LAB	36	WF	4/6	50	POTEMPA
QUIZ	36	WF	3	74	POTEMPA
LAB	37	MF	10/12	50	COWIN
QUIZ	37	MF	8	76	HEDBERG
LAB	39	MF	11/1	50	SACKHEIM
QUIZ	39	TT	12	74	SACKHEIM
LAB	40	MW	2/4	50	KLAAS
QUIZ	40	TT	12	75	KLAAS
LAB	41	TT	10/12	50	KLAAS
QUIZ	41	MW	11	75	KLAAS

Chem. 104. Chemistry of the Metallic Elements. Credit 4 hours. Limited to students in engineering curricula. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105, 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

LEC	Q	TT	12	217	HUITEMA
LAB	46	MW	10/12	50	JOHNSON
QUIZ	46	TT	9	74	JOHNSON
LAB	47	TT	9/11	50	PERRY
QUIZ	47	MW	9	75	PERRY
LAB	48	WF	12/2	50	PERRY
QUIZ	48	TT	1	76	PERRY
LAB	49	MW	2/4	50	PERRY
QUIZ	49	MF	11	76	PERRY

Chem. 105. Inorganic Chemistry and Qualitative Analysis. Credit 5 hours. For students who are not eligible for Chemistry 104 or 106. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	R	TT	1	217	HUNT
LAB	51	TT	8/11	53	FARAG
QUIZ	51	WF	1	76	FARAG
LAB	52	MWF	10/12	53	HUNT
QUIZ	52	TT	11	74	HUNT
LAB	53	MWF	1/3	53	HUNT/MANSFIELD
QUIZ	53	TT	3	80	HUNT

Chem. 106. Inorganic Chemistry. Credit 5 hours. Metallic elements. For students in curricula in chemistry, chemical engineering and chemistry majors who are not premedical students. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104, 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

LEC	T	TT	3	217	RIETZ
LAB	61	WF	3/6	50	RIETZ
QUIZ	61	TT	4	74	RIETZ

Chem. 107. General Chemistry. Credit 5 hours. For students in curricula in chemistry or chemical engineering. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school backgound in chemistry as shown by a placement examination.

LEC	H	WF	3	217	WELDON
LAB	66	TT	10/12	53	WELDON
QUIZ	66	MWF	11	80	WELDON
LAB	67	TT	3/5	53	WELDON/COWIN
QUIZ	67	MTT	1	74	WELDON
LAB	68	TT	12/2	53	DAFLER
QUIZ	68	MWF	12	80	DAFLER
LAB	69	MW	1/3	53	DELFS
QUIZ	69	MTT	3	76	DELFS

Chem. 109. General and Inorganic Chemistry. Credit 5 hours. A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Limited to students in the engineering and physics curricula. Not open to students who have college credit in chemistry. Student with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry, as shown by placement examination.

LEC	F	MWF	1	227	HUITEMA
LAB	71	F	9/12	50	HUITEMA
QUIZ	71	MW	10	75	HUITEMA
LAB	72	TU	11/2	50	
QUIZ	72	WF	2	76	
LAB	73	TH	9/12	50	PARE
QUIZ	73	MF	10	80	PARE
LAB	74	W	2/5	50	MANSFIELD/FARAG
QUIZ	74	TT	3	75	STEINER
LAB	75	F	2/5	50	DELFS
QUIZ	75	TT	1	80	DELFS

Chem. 110. Qualitative Analysis. Credit 5 hours. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major in chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106 or equivalent.

LEC	Q	TT	12	65	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12	53	
QUIZ	76	TT	9	75	MANSFIELD

Chem. 122. Elementary Quantitative Analysis. Credit 5 hours. Gravimetric and volumetric analysis, stoichiometrical relations, practical application: Prerequisite: Chemistry 105 or equivalent.

LEC	N	TT	10	227	BABLER
LAB	81	MWF	9/12	54	GOTTLIEB
QUIZ	81	TU	9	76	GOTTLIEB
LAB	82	MWF	1/4	54	GOTTLIEB
QUIZ	82	TH	9	76	GOTTLIEB

Chem. 124. Quantitative Analysis. Credit 5 hours. For all students in the chemistry curriculum and chemical engineering. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	G	MW	2	227	BABLER
LAB	86	MWF	8/11	54	BABLER/COWIN
QUIZ	86	F	2	80	BABLER
LAB	87	MWF	3/6	54	SAVOY
QUIZ	87	TU	4	76	SAVOY

Chem. 133. Elementary Organic Chemistry. Credit 5 hours. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Prerequisite: Chemistry 105 or equivalent.

LEC	D	WF	11	217	CRUM
EXAM		M	11	217	
LAB	91	TT	9/12	52	CRUM
QUIZ	91	M	9	74	CRUM
LAB	92	MW	2/5	52	CRUM
QUIZ	92	F	2	75	CRUM
LAB	93	MW	8/11	52	DAFLER
QUIZ	93	F	9	75	DAFLER

Chem. 342. Physical Chemistry. Credit 3 hours. Introduction to the study of chemical principles. Prerequisite: Chemistry 124; Physics 106, 107 and 108, or two semesters of general physics with concurrent registration in the third semester; credit or registration in Mathematics 143; or equivalents.

LEC	D	MWF	11	205	SCHRAGE

Chem. 343. Physical Chemistry Laboratory. Credit 1 hour. Quantitative experimental study of chemical principles. Prerequisite: Credit or registration in Chemistry 342.

LAB	98	W	2/5	50A	SCHRAGE

CIVIL ENGINEERING

C. E. 101. Elementary Surveying. Credit 3 hours. Fundamental surveying operations. Prerequisite: General Engineering 101 and credit or registration in Mathematics 123.

A	TT	9/12	63
B	WF	9/12	63

C. E. 210. Properties of Soils. Credit 3 hours. Identification and classification of earth materials; hydraulic and mechanical properties of soils; character of natural soil deposits; and appraisal of methods of subsurface exploration. Laboratory determination of the index properties of soils. Prerequisite: Theoretical and Applied Mechanics 150, Geology 150, and junior standing in engineering or architecture.

F1	MF	1	63
F	W	1/4	63

C. E. 214. Composition and Properties of Concrete. Credit 2 hours. Properties and uses of cements, aggregates, mixing water, and admixtures; composition and properties of concrete mixtures; field practices in the production of concrete. Laboratory practice in the design and control of quality concrete. Prerequisite: Theoretical and Applied Mechanics 223, or 224, and junior standing in engineering or architecture, or consent of instructor.

C	MF	2/4	61

C. E. 261. Theory of Determainate Structures. Credit 3 hours. A study of the fundamental theory of statically determinate structures with applications to the evaluation of reactions, shears, and moments in beams and stresses in trusses for fixed and moving loads; introduction to deflection computations. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

E1	MWF	12	63

ECONOMICS

Econ. 100. Introduction to Business. Credit 3 hours. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only.

B1	MWF	9	21	SHAW
C1	MWF	10	17	GELDARD
D1	MWF	11	17	GELDARD
E1	MWF	12	236	FERRERA
F1	MW	1	19	DICKETT
	F	1	17	
G1	MWF	2	24	SELTZER
H1	MWF	3	21	FERRERA
J1	MWF	4	21	FERRERA
J2	MWF	4	19	DICKETT

M1	MTT	9	236	MILLER
N1	MTT	10	236	MILLER
Q1	MTT	12	22	SHAW
R1	MTT	1	16	CRABB
T1	MTT	3	24	SHAW
U1	MTT	4	24	CRABB

Econ. 102. Principles of Economics I. Credit 3 hours. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Prerequisite: One year of college work.

D1	MWF	11	236	FERRERA
G1	MWF	2	22	BERG
H1	MWF	3	22	BERG
M1	MTT	9	16	SELTZER
N1	MTT	10	16	SELTZER
R1	MTT	1	22	GILLETT
T1	MTT	3	38	GILLETT

Econ. 103. Principles of Economics II. Credit 3 hours. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Prerequisite: Economics 102.

D1	MWF	11	22	SHAW
F1	MWF	1	23	GELDARD
G1	MWF	2	17	LARSON

Econ. 108. Elements of Economics. Credit 3 hours. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	24	DUNNE
F1	MWF	1	33	DUNNE
H1	MWF	3	17	LARSON
J1	MWF	4	38	SELTZER
N1	MTT	10	33	LARSON
Q1	MTT	12	33	LARSON
Q2	MTT	12	17	MILLER
R1	MTT	1	17	MILLER

Econ. 136. American Economic History. Credit 3 hours. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Open to freshmen and sophomore only.

C1	MW	10	20	CRABB
	F	10	19	
D1	MWF	11	16	DICKETT
E1	MWF	12	16	CRABB
H1	MWF	3	19	DICKETT

Econ. 138. European Economic History. Credit 3 hours. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open to freshmen and sophomores only.

G1	MWF	2	23	GELDARD

Econ. 170. Elements of Statistics. Credit 3 hours. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economic 171. Prerequisite: Economics 102 or 108; sophomore standing.

QUIZ	1	MW	9	33	DERRICK
LAB	1	F	9/11	33	DERRICK
QUIZ	2	MW	11	33	DERRICK
LAB	2	F	11/1	33	DERRICK
QUIZ	3	MW	2	33	DERRICK
LAB	3	F	2/4	33	DERRICK

EDUCATION

Ed. 101. Nature of the Teaching Profession. Credit 2 hours. An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

B1	WF	9	28	RICKS
D1	WF	11	28	RICKS
E1	WF	12	28	RICKS
N1	TT	10	28	RICKS

Ed. 201. Foundations of American Education. Credit 2 hours. A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Prerequisite: Psychology 100; Education 101. Open only to fourth semester students.

F1	WF	1	28	LITTLE

ELECTRICAL ENGINEERING

E. E. 126. Electric Circuits and Fields. Credit 4 hours. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	B1	MWF	9	110
LAB	B	TU	9/12	120
QUIZ	G1	MWF	2	144
LAB	G	TH	3/6	120

ENGLISH

English 101. Introduction to Poetry. Credit 3 hours. Understanding of poetry through the reading and discussion of representative poems. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	216	FRIEND
E1	MWF	12	216	COX
H1	MWF	3	216	F JOHNSON
N1	M	10	218	LEONHARD
	TT	10	216	
R1	MTT	1	218	CHILLAG
T1	M	3	218	GALLAGHER
	TT	3	216	

English 102. Introduction to Drama. Credit 3 hours. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	216	I MILLER
D1	MWF	11	216	DAVIS
P1	M	11	231	LOVE
	TT	11	216	
R1	M	1	231	MACKIN
	TT	1	216	
U1	MTT	4	218	J JOHNSON

English 103. Introduction to Fiction. Credit 3 hours. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's *Pride and Prejudice,* Balzac's *Pere Goriot,* Arnold Bennett's *Old Wives' Tale,* Dostoevski's *Crime and Punishment,* E. M. Forster's *A Passage to India.* and the anthology *Reading Modern Short Stories.* Students with 95 or more credit hours receive only 2 hours credit.

C1	MWF	10	216	GRIEST
F1	MWF	1	216	KERWICK
G1	MWF	2	216	HARRIS
H1	MWF	3	237	RUDIN
J1	MWF	4	216	CASSELL
L1	MTT	8	218	LEONHARD
N1	TTF	10	218	SCHILLER
Q1	TTF	12	218	BLUM
U1	MTT	4	212	S MILLER

English 113. American Literature. Credit 3 hours. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

G1	MWF	2	218	STRONKS
L1	MTT	8	231	WILLETT
M1	M	9	230	WILLETT
	TT	9	218	
Q1	M	12	218	WRIGHT
	TT	12	216	

English 114. American Literature. Credit 3 hours. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	220	STRONKS
M1	M	9	218	WRIGHT
	TT	9	216	
P1	MTT	11	218	NICHOLAS
T1	TT	3	220	JORDAN
	F	3	202	

English 121. Chief English Writers Before 1800. Credit 3 hours. *Canterbury Tales Utopia,* two plays by Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas.* This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

F1	MWF	1	220	ATWOOD
P1	MTT	11	220	S MILLER

English 122. Chief English Writers of the Nineteenth Century. Credit 3 hours. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam,* readings from T. H. Huxley, Browning's poems, and one novel. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

G1	MWF	2	220	COX

English 123. Chief Modern English Writers. Credit 3 hours. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Q1	TTF	12	220	WEISS

English 131. Introduction to Shakespeare. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	220	VEST

FRENCH

French 101. Elementary Course. Credit 4 hours. Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	230	LEIN
B1	TWTF	9	230	LEIN
C1	TWTF	10	232	SKOGEN
D1	TWTF	11	232	LALLAS
D2	TWTF	11	230	LEIN
E1	TWTF	12	230	LALLAS
F1	TWTF	1	230	LALLAS
H1	TWTF	3	230	LUTTON
J1	TWTF	4	230	LUTTON

French 102. Elementary Course. Credit 4 hours. Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	232	SKOGEN
E1	TWTF	12	232	SKOGEN
H1	TWTF	3	232	LALLAS

French 103. Modern French. Credit 4 hours. Rapid reading of modern authors, syntax, and composition; some conversational practice. Prerequisite: French 102 or two years of high school French.

B1	TWTF	9	234	SCHUYLER
C1	TWTF	10	234	SCHUYLER
E1	TWTF	12	234	LEIN
F1	TWTF	1	232	SKOGEN

French 104. Modern French. Credit 4 hours. Continuation of French 103. Prerequisite: French 103 or three years of high school French.

D1	TWTF	11	234	SCHUYLER

French 201. Introduction to French Literature. Credit 3 hours. Prerequisite: French 104 or four years of high school French.

R1	TT	1	236	SCHUYLER
	F	1	206	

G. E. 101. Engineering Graphical Communication. Credit 3 hours. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Prerequisite: Plane geometry.

A1	MWF	8/10	135
A2	MWF	8/10	136
A3	MWF	8/10	137
A4	MWF	8/10	141
B1	MWF	10/12	135
B2	MWF	10/12	136
B3	MWF	10/12	137
B4	MWF	10/12	141
C1	MWF	12/2	135
C2	MWF	12/2	137
C3	MWF	12/2	141
D1	MWF	2/4	135
D2	MWF	2/4	136
D3	MWF	2/4	137
D4	MWF	2/4	141
F1	TT	8/11	135
F2	TT	8/11	136
F3	TT	8/11	137
F4	TT	8/11	141
F5	TT	8/11	143
G1	TT	11/2	135
G2	TT	11/2	136
G3	TT	11/2	137
G4	TT	11/2	141
G5	TT	11/2	143

G. E. 102. Engineering Geometry. Credit 3 hours. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Prerequisite: General Engineering 101.

A5	MWF	8/10	143
B5	MWF	10/12	143
B7	MWF	10/12	146
C5	MWF	12/2	143
D5	MWF	2/4	143

G. E. 107. Architectural Projections. Credit 2 hours. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Prerequisite: Plane geometry.

A6	MWF	8/10	145
B6	MWF	10/12	145
C6	MWF	12/2	145
D6	MWF	2/4	145
D7	MWF	2/4	146
F6	TT	8/11	145
G6	TT	11/2	145
G7	TT	11/2	146

G. E. 108. Architectural Projections. Credit 2 hours. Shades and shadows; oblique, isometric, and perspective drawings; developments. Prerequisite: General Engineering 107.

A7	MWF	8/10	146
C7	MWF	12/2	146

G. E. 212. Graphical Calculation. Credit 1 hour. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

A2	M	12/2	136
B2	W	12/2	136

220. History of Engineering. Study of the important elements in the growth of the art and science of engineering from ancient times to the present; lives of some of the men who have been leaders; effect of engineering on the social conditions of the various periods. 3. Prerequisite: Junior standing.

B1	MWF	9	144

GEOGRAPHY

Geog. 104. World Regional Geography. Credit 3 hours. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

N1	MTT	10	14	COLBY
R1	MTT	1	14	COLBY

Geog. 105. Introductory Economic Geography. Credit 3 hours. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students, but open to others. Students with 95 or more credit hours receive only 2 hours credit.

E1	MW	12	14	CUTSHALL
	F	12	13	

Geography 107. Weather and Climate. Credit 4 hours. Planetary relations; the atmosphere; its composition, functions and behavior in the production of various weather types; air masses and air mass analysis; climatic types and climatic regions; application to present day activities. This course and Geography 108 meet the general education requirements in physical sciences in Liberal Arts and Sciences. Lectures, quiz and laboratory. Prerequisite: none.

LEC	N1	TT	10	213	RHEUMER
LAB	1	M	8/10	13	RHEUMER
QUIZ	1	W	8	13	RHEUMER
LAB	2	M	10/12	13	FINNEY
QUIZ	2	W	11	13	FINNEY
LAB	3	TU	12/2	13	RHEUMER
QUIZ	3	TH	1	13	RHEUMER
LAB	4	W	9/11	13	CUTSHALL
QUIZ	4	F	10	13	CUTSHALL

Geography 108. Landforms and Earth Resources. Credit 4 hours. The study of landforms from the geographic point of view; maps and their use; earth resources (native vegetation, soils, water resources, mineral resources); their development and utilization. This course and Geography 107 meet the general education requirements in physical sciences in Liberal Arts and Sciences. Lectures, quiz and laboratory. Prerequisite: none.

LEC	Q1	TT	12	227	FINNEY
LAB	11	M	12/2	13	RHEUMER
QUIZ	11	W	12	13	RHEUMER
LAB	12	TU	9/11	13	FINNEY
QUIZ	12	TH	10	13	FINNEY

Geog. 123. Geography of Illinois. Credit 3 hours. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. Prerequisite: Geography 101 or 104, or consent of instructor.

D1	MWF	11	13	CUTSHALL

Geol. 101. Physical Geology. Credit 4 hours. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	205	KARPINSKI
LAB	1	TU	8/10	42	DEMAR
QUIZ	1	TH	8	42	DEMAR
LAB	2	TH	9/11	42	KARPINSKI
QUIZ	2	TU	10	42	KARPINSKI
LAB	3	M	10/12	42	KURS
QUIZ	3	W	10	42	KURS
LAB	4	F	10/12	42	DEMAR
QUIZ	4	W	11	42	DEMAR
LAB	5	W	1/3	42	KURS
QUIZ	5	M	2	42	KURS
LAB	6	F	1/3	42	KURS
QUIZ	6	M	1	42	KURS
LAB	7	M	3/5	42	KURS
QUIZ	7	W	4	42	KURS
LAB	8	F	3/5	42	DEMAR
QUIZ	8	W	3	42	DEMAR

Geol. 102. Historical Geology. Credit 4 hours. Evolution of the earth and its life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or equivalent.

LEC	N	TT	10	65	DEMAR
LAB	11	TH	11/1	42	DEMAR
QUIZ	11	TU	12	42	DEMAR

Geol. 131. Mineralogy. Credit 4 hours. A systematic study of minerals. The nature of minerals as crystalline materials, and their geologic relations are emphasized. Crystal models, crystals, and the common non-silicate minerals are studied in the laboratory. Lecture and laboratory. Prerequisite: One semester of college chemistry.

	16	MWF	8/10	42	KURS

Geol. 150. Geology for Engineers. Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	G	MW	2	217	KARPINSKI
LAB	21	TU	3/5	42	KARPINSKI

GERMAN

German 101. Elementary Course. Credit 4 hours. Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	228	HOUGH
B1	TWTF	9	228	VARDAMAN
B2	TWTF	9	229	BRAUNFELD
C1	TWTF	10	228	TEICHMANN
C2	TWTF	10	229	BRAUNFELD
D1	TWTF	11	228	TEICHMANN
D2	TWTF	11	229	WILLNER
E1	TWTF	12	229	HARTOCH
E2	TWTF	12	228	KAUF
F1	TWTF	1	228	KAUF
H1	TWTF	3	228	WILLNER
H2	TWTF	3	229	
J1	TWTF	4	229	

German 102. Elementary Course. Credit 4 hours. Continuation of German 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

B1	TWTF	9	226	HOUGH
E1	TWTF	12	226	HOUGH
F1	TWTF	1	226	TEICHMANN
H1	TWTF	3	226	KAUF

German 103. Intermediate Course. Credit 4 hours. Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, two years of high school German, or equivalent.

B1	TWTF	9	231	TEICHMANN
C1	TWTF	10	231	HOUGH
D1	TWTF	11	231	KAUF
E1	TWTF	12	231	WILLNER
F1	TWTF	1	231	WILLNER
H1	TWTF	3	37	HARTOCH

German 104. Intermediate Course. Credit 4 hours. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, three years of high school German, or equivalent.

D1	TWTF	11	226	BRAUNFELD
F1	TWTF	1	229	BRAUNFELD

German 113. Practice in Conversation. Credit 2 hours. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

G1	WF	2	16	HARTOCH

German 210. Masterpieces of German Literature. Credit 3 hours. Introduction to German literature, in subjects, forms, and ideals. Prerequisite: Two years of college German, or equivalent.

N1	TTF	10	226	VARDAMAN

HISTORY

Hist. 111. History of Western Civilization to 1815. Credit 4 hours. Europe from the age of the great discoveries to the close of the Napoleonic wars. This course with History 112 meets the Social Science requirement in Liberal Arts and Sciences. Students with 95 or more credit hours receive only 3 hours credit.

Lecture and quiz sections in this course are coordinate. The quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	B	MW	9	205	NICHOLSON
LEC	A1	MW	8	37	ASCH
LEC	D1	MW	11	37	NICHOLSON
QUIZ	F1	MW	1	37	NICHOLSON
QUIZ	M1	TT	9	37	ASCH
QUIZ	Q1	TT	12	20	GOODMAN
QUIZ	T1	TT	3	14	GOODMAN

LEC	F	MW	1	205	UNFER
QUIZ	A2	MW	8	21	UNFER
QUIZ	H1	MW	3	14	UNFER
QUIZ	L1	TT	8	20	UNFER
QUIZ	N1	TT	10	21	UNFER
QUIZ	R1	TT	1	20	UNFER

Hist. 131. Histoy of England to 1714. Credit 4 hours. A survey of the political and constitutional, social and economic, church and cultural, and imperial history of the British people from the beginning of English history through 1714. This course with History 132 meets the humanities requirement in Liberal Arts and Sciences. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D	W	11	213	BILL/GOODMAN
QUIZ	L1	TTF	8	37	ASCH
QUIZ	N1	TTF	10	37	GOODMAN
QUIZ	P1	TT	11	94	BILL
		F	11	96	
QUIZ	Q1	TT	12	28	BILL
		F	12	37	
QUIZ	R1	TTF	1	96	GOODMAN

Hist. 151. History of the United States to 1865. Credit 4 hours. Colonial foundations, movement for independence, early years of the Republic. Prerequisite: Sophomore standing.

LEC	D	M	11	213	BILL/JONES
QUIZ	G1	MWF	2	37	BILL
QUIZ	L1	MTT	8	96	JONES
QUIZ	M1	MTT	9	28	BILL
QUIZ	N1	M	10	37	JONES
		TT	10	24	
QUIZ	P1	TT	11	28	RIDDLE
		TH	12	37	
QUIZ	Q1	MTT	12	96	JONES
QUIZ	R1	MTT	1	28	JONES

Hist. 181. The Ancient World. Credit 3 hours. Ancient empires and Greece. Prerequisite: Sophomore standing.

QUIZ	C1	MWF	10	28	NICHOLSON

Hist. 369. CONSTITUTIONAL DEVELOPMENT OF THE UNITED STATES TO 1865. Credit 3 hours. Prerequisite: one year of college history or political science.

QUIZ	M1	MTT	9	96	RIDDLE

HUMANITIES

Humanities 101. Values in Literature. Credit 4 hours. A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities.

A1	TWTF	8	214	RUNYAN
B1	TWTF	9	214	BLUM
C1	TWTF	10	214	RUNYAN
E1	TWTF	12	214	KOGAN
F1	TWTF	1	214	JORDAN
H1	TWTF	3	214	KOGAN
J1	TWTF	4	214	WEISS

Humanities 151. The Heritage of Western Culture. Credit 4 hours. A study of literary masterpieces representing significant contributions to the thinking of the Western World on the topics of man's fate and his personal adjustment to life. This course, plus Humanities 152, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	TWTF	11	214	VARDAMAN
F1	TWTF	1	234	VARDAMAN
H1	TWTF	3	234	SCHILLER

HYGIENE

Hygiene 104. Personal and Community Hygiene. Credit 2 hours. This course covers basic principles of hygiene. Especially recommended for those going into teaching, occupational therapy, social work, etc. Students with 95 or more credit hours receive only 1 hour credit.

A1	WF	8	237
D1	WF	11	237
F1	WF	1	237
G1	WF	2	237
L1	TT	8	237
M1	TT	9	237
N1	TT	10	237
P1	TT	11	237
R1	TT	1	237

Hygiene 110. Public Health. Credit 2 hours. Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P1	TT	11	16	

MANAGEMENT

Management 101. Industrial Organization and Management. Credit 3 hours. Organization plans, administrative policies, and management problems with special attention to manufacturing units. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	23	GILLETT
D1	MWF	11	23	GILLETT

MARKETING

Marketing 101. Principles of Marketing. Credit 3 hours. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

C1	MWF	10	24	BERG
E1	MWF	12	23	BERG

MATHEMATICS

Math. 102. Basic Mathematics. Credit 3 hours. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. Prerequisite: Mathematics 101.

G1	MWF	2	101	NOLAN

Math. 103. Introduction to College Algebra. Credit 3 hours. Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MWF	8	106	ZIOMEK
A2	TT	8	106	SJOBLOM
	F	8	111	
A3	MTWTF	8	101	VEDRAL

A4	MTWTF	8	82	GORDON
A5	MTWTF	8	103	LUMELY
A6	MTWTF	8	201	ONDRAK
A7	MTWTF	8	100	
B1	MWF	9	102	FEINSTEIN
B2	MTWTF	9	104	BALLARD
B3	MTWTF	9	105	
C1	MTWTF	10	104	SCHOLOMITI
C2	MTWTF	10	82	VEDRAL
C3	MTWTF	10	100	OLSEN
C4	MTWTF	10	103	SEARS
C5	MTWTF	10	201	ZIOMEK
C6	MTWTF	10	111	ZYGMUND
D1	MTWTF	11	102	LUMLEY
D2	MTWTF	11	105	LINN
D3	MTWTF	11	106	SEARS
D4	MTWTF	11	101	ONDRAK
E1	MTWTF	12	82	HILL
F1	MWF	1	103	KUZMANIC
G1	MWF	2	104	KUZMANIC
G2	MWF	2	100	MERTES
H1	MTWTF	3	100	LARIVIERE
H2	MTWTF	3	103	NOLAN
H3	MTWTF	3	101	ALBERTI
J1	MTWTF	4	104	HENDERLEITER
J2	MTWTF	4	82	LASHER
J3	MTWTF	4	201	
T1	TT	3	106	PENNISI
	F	3	111	

Math. 108. Elementary Plane Geometry for Veterans. No credit. This course deals with the usual topics of high school geometry. It is designed as a refresher course for those who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

R1	TT	1	106	LINN
	F	1	111	

Math. 109. Fundamentals of Mathematics. Credit 4 hours. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. Prerequisite: Consent of the department.

F1	MTWT	1	100	ALBERTI

Math. 111. Algebra. Credit 5 hours. Students having 1½ or more units of high school algebra may not take this course unless they have the approval of their college office. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Entrance algebra, 1 unit and plane geometry, 1 unit. Required for students in Architecture deficient in algebra. Other students admitted only by consent of their college office and the mathematics Department.

D1	MTWTF	11	201	GORDON
E1	MTWTF	12	201	SJOBLOM
F1	MTWTF	1	201	LASHER
H1	MTWTF	3	102	WILEY
H2	MTWTF	3	201	

Math. 112. College Algebra. Credit 3 hours. Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

* sections open to Commerce students only.

* A1	MWF	8	105	FEINSTEIN
B1	MWF	9	103	FRANK
C1	MWF	10	105	FRANK
D1	MWF	11	100	FEINSTEIN
D2	MWF	11	111	
E1	MWF	12	111	KUZMANIC
F1	MWF	1	104	LARIVIERE
* G1	MWF	2	102	LINN
G2	MWF	2	82	DINKINES

G3	MWF	2	105	HILL
G4	MWF	2	106	
J1	MWF	4	102	DINKINES
* L1	MTT	8	111	CURTIS
M1	TT	9	106	BERGLUND
	F	9	111	
R1	MTT	1	111	OLSEN
R2	TT	1	103	MERTES
	F	1	100	
T1	MTT	3	111	MERTES

Math. 114. Plane Trigonometry. Credit 2 hours. Identities, equations, addition formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	105	ZIOMEK
M1	TT	9	103	SJOBLOM
N1	TT	10	101	BERGLUND
N2	TT	10	105	HARTLEY
P1	TT	11	100	BALLARD
P2	TT	11	103	
P3	TT	11	111	MURPHY
Q1	TT	12	102	HARTLEY
Q2	TT	12	103	HENDERLEITER
Q3	TT	12	105	
Q4	TT	12	111	MURPHY
R1	TT	1	104	NOLAN
R2	TT	1	101	ZYGMUND
R3	TT	1	105	LARIVIERE
T1	TT	3	82	HILL
U1	TT	4	102	WILEY
U2	TT	4	105	PENNISI

Math. 123. Analytic Geometry. Credit 5 hours. Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 112 and 114.

A1	MTWTF	8	104	SCHOLOMITI
B1	MTWTF	9	101	GORDON
B2	MTWTF	9	82	VEDRAL
B3	MTWTF	9	201	LUMELY
C1	MTWTF	10	102	SJOBLOM
D1	MTWTF	11	104	HARTLEY
D2	MTWTF	11	82	ZYGMUND
E1	MTWTF	12	104	SEARS
E2	MTWTF	12	106	BERGLUND
E3	MTWTF	12	100	OLSEN
F1	MTWTF	1	102	WILEY
H1	MTWTF	3	104	HENDERLEITER
J1	MTWTF	4	100	LARIVIERE
J2	MTWTF	4	103	ALBERTI
J3	MTWTF	4	101	MERTES

Math. 133. Calculus. Credit 3 hours. First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Prerequisite: Mathematics 123.

B1	MWF	9	106	CURTIS
D1	MWF	11	103	FRANK
E1	MWF	12	102	LINN
F1	MWF	1	105	ZYGMUND
F2	MWF	1	106	BERGLUND
G1	MWF	2	111	PENNISI
G2	MWF	2	201	HENDERLEITER
H1	MWF	3	82	DINKINES
J1	MWF	4	106	WILEY

Math. 143. Calculus. Credit 5 hours. Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expansion of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Prerequisite: Mathematics 133.

A1	MTWTF	8	102	BALLARD
B1	MTWTF	9	100	ZIOMEK
C1	MTWTF	10	106	ONDRAK
E1	MTWTF	12	101	SCHOLOMITI
F1	MTWTF	1	82	MURPHY
H1	MTWTF	3	105	LASHER
J1	MTWTF	4	111	NOLAN

Math. 341. DIFFERENTIAL EQUATIONS. Credit 3 hours. Prerequisite: One year of calculus.

H1	MWF	3	106	HILL

Math. 343. Advanced Calculus. Credit 3 hours. The course includes the vector calculus, differential and integral calculus of functions of several variables, infinite series, power series, and line and surface integrals. Prerequisite: One year of calculus.

E1	MWF	12	103	FEINSTEIN

Math. 345. Differential Equations and Orthogonal Functions. Credit 3 hours. Theory of solving the standard elementary differential equations and application of these. Power series, solutions of second order equations and operational methods are included. A brief introduction is given to partial differential equations and Fourier series methods. Prerequisite: One year of calculus.

C1	MWF	10	101	HARTLEY
E1	MWF	12	105	DINKINES
G1	MWF	2	103	MURPHY
J1	MWF	4	105	PENNISI

Math. 346. COMPLEX VARIABLES AND APPLICATIONS. Credit 3 hours. Covers the standard topics in complex variables and, in addition, an introduction to integration by residues, the argument principles, conformal maps, Laplace transforms, potential fields. Prerequisite: Mathm.343 or consent of instructor.

F1	MWF	1	101	FRANK

MECHANICAL ENGINEERING

M. E. 182. Manufacturing Processes. Credit 3 hours. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Prerequisite: General Engineering 101, sophomore standing.

	B1	MWF	9	65
	G1	MWF	2	65

M. E. 183. Materials Casting. Credit 3 hours. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Prerequisite: General Engineering 101; sophomore standing.

LEC	D	MF	11	65
LAB	A	TU	8/11	71
LAB	B	W	11/2	71
LAB	C	TU	11/2	71

M. E. 184. Metal Processing. Credit 3 hours. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Prerequisite: General Engineering 101; credit or registration in Integral Calculus and Physics 108.

LEC	P	TT	11	65
LAB	A	M	11/2	64
LAB	B	W	11/2	64
LAB	C	F	2/5	64

M. E. 209. Thermodynamics and Heat Transfer. Credit 3 hours. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Prerequisite: Physics 107, Mathematics 142 or 143.

	D1	MWF	11	110

M. E. 221. Mechanics of Machinery. Credit 5 hours. Linkages, cams, and gears; belts, ropes, and chains; velocities, accelerations, and inertia forces in machines; vibrations and critical speeds; balancing of engines; principle of the gyroscope. Prerequisite: T.A.M. 156 or registration in Theoretical and Applied Mechanics 211.

LEC	J1	MWF	4	146
LAB	J	TT	8/11	146

MILITARY SCIENCE AND TACTICS

Mil. Sci. 101. Freshman Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: Organization of the Army and ROTC; individual weapons and marksmanship, and leadership, drill and command. Prerequisite: Military Science department approval.

THEORY	1	MW	9	238	CLAMPITT
THEORY	2	TT	9	238	CLAMPITT
THEORY	3	MW	10	238	CLAMPITT
THEORY	4	TT	10	238	CLAMPITT
THEORY	5	MW	11	238	CLAMPITT
THEORY	6	TT	11	238	CLAMPITT
DRILL	1	TU	8	AUD	JONES
DRILL	2	W	8	AUD	JONES
DRILL	3	TH	8	AUD	JONES

Mil. Sci. 103. Sophomore Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: Map and aerial photographs; basic tactics; and leadership, drill, and command. Prerequisite: Military Science 102 or equivalent.

THEORY	1	MW	1	238	CHAMBERS
THEORY	2	TT	1	238	CHAMBERS
THEORY	3	MW	2	238	CHAMBERS
THEORY	4	TT	3	238	CHAMBERS
DRILL	1	TU	8	AUD	CRUMPACKER
DRILL	2	W	8	AUD	CRUMPACKER
DRILL	3	TH	8	AUD	CRUMPACKER

MUSIC

Music 100. Rudiments of Theory. Credit 2 hours. Notation, scales, intervals, chords, terminology.

D1	MWF	11	354	FISSINGER

Music 130. Introduction to the Art of Music, I. Credit 3 hours. Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For non-music students only.

C1	MWF	10	354	FISSINGER

Music 150. Music Ensemble. Credit ½ hour. Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit.

A	TT	*2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
C	TT	***11	354	FISSINGER
	F	3/5	354	

* Band rehearsals often continue into the 3 o'clock hour; attendance at 3 o'clock is desired, but not required.

*** Students unable to attend all 4 hours may participate with consent of the instructor. To earn credit, attendance at rehearsals at least 2 hours weekly is required.

PHILOSOPHY

Phil. 101. Introduction to Philosophy. Credit 3 hours. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form an approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

B1	MWF	9	94	PAGE
E1	MWF	12	94	MORRIS
G1	MWF	2	28	PAGE

Phil. 102. Logic. Credit 3 hours. Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

A1	MWF	8	94	MORRIS
F1	MWF	1	236	PAGE
P1	MTT	11	96	MORRIS
Q1	TT	12	94	PAGE
	F	12	96	

Phil. 105. Moral Ideas and Practice. Credit 2 hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

P1	TT	11	37	PAGE

PHIL. 303. HISTORY OF GREEK AND ROMAN PHILOSOPHY. Credit 4 hours. The teachings of the philosophers who figure most prominently in the Greek and Roman era--approximately the period from the 6th century B.C. to the 4th century A.D. Prerequisite: junior standing or consent of the instructor.

B1	TT	9	94	MORRIS
	WF	9	96	

PHYSICAL EDUCATION FOR MEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

* Special conditioning sections or Adaptive only.

P. E. M. 101, 102, 103, 104. Prescribed Exercises. Credit 1 hour. Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

C	MWF	10	GYM	NEMOTO
D	MWF	11	GYM	NEMOTO
E	MWF	12	GYM	MAKSUD
F	MWF	1	GYM	MAKSUD

P. E. M. 106. Developmental Activities. Credit 1 hour. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards.

* A	MWF	8	GYM	RUSSO
B	MWF	9	GYM	BECK
C	MWF	10	GYM	FORDHAM
D1	MWF	11	GYM	BECK
D2	MWF	11	GYM	DESCOUROUEZ
E1	MWF	12	GYM	VERSEN
E2	MWF	12	GYM	RADER
F	MWF	1	GYM	RADER
G	MWF	2	GYM	MILLER
* H	MWF	3	GYM	RUSSO

P. E. M. 107. Beginning Swimming. Credit 1 hour. For non-swimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

MN	TT	9	LAWSON YMCA	DESCOUROUEZ

P. E. M. 109. Advanced Swimming. Credit 1 hour. For swimmers (ability to swim at least 100 yards). Student must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

NP	TT	10	LAWSON YMCA	KRISTUFEK

P. E. M. 112. Individual Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

B	MWF	9	GYM	FORDHAM
NP	TT	10	GYM	RUSSO
D	MWF	11	GYM	MILLER
QR	TT	12	GYM	MONTCALM
F	MWF	1	GYM	FORDHAM

P. E. M. 113. Double Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

G	MWF	2	GYM	SPRINGER

P. E. M. 114. Apparatus Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	DESCOUROUEZ
D	MWF	11	GYM	MONTCALM
PQ	TT	11	GYM	MONTCALM
E	MWF	12	GYM	BECK
RS	TT	1	GYM	BECK

P. E. M. 117. Boxing. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

B	MWF	9	GYM	RUSSO
E	MWF	12	GYM	MILLER
QR	TT	12	GYM	KRISTUFEK
F	MWF	1	GYM	BERRAFATO

P. E. M. 118. Wrestling. Credit 1 hour. Skill, knowledge, attitudes, and conditions.

C	MWF	10	GYM	STRNAD
NP	TT	10	GYM	STRNAD
D	MWF	11	GYM	VERSEN
E	MWF	12	GYM	STRNAD
QR	TT	12	GYM	DESCOUROUEZ
F	MWF	1	GYM	BECK
G	MWF	2	GYM	DESCOUROUEZ

P. E. M. 120. Personal Defense Activities. Credit 1 hour. Skills, knowledge, attitudes and conditions.

PQ	TT	11	GYM	NEMOTO
RS	TT	1	GYM	KRISTUFEK
H	MWF	3	GYM	RADER

P. E. M. 122. Individual Athletics. Credit 1 hour. Skills, knowledge, attitudes and conditions.

E	MWF	12	GYM	SPRINGER

P. E. M. 123. Weight Lifting. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

A	MWF	8	GYM	NEMOTO
LM	TT	8	GYM	BECK
B	MWF	9	GYM	VERSEN
MN	TT	9	GYM	STRNAD
C	MWF	10	GYM	MILLER
D	MWF	11	GYM	RADER
PQ	TT	11	GYM	VERSEN
E	MWF	12	GYM	FORDHAM
F	MWF	1	GYM	GEDVILAS
RS	TT	1	GYM	DESCOUROUEZ
G	MWF	2	GYM	BERRAFATO

P. E. M. 129. Volleyball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

	LM	TT	8	GYM	NEMOTO
	MN	TT	9	GYM	VERSEN
	NP	TT	10	GYM	BERRAFATO
	PQ	TT	11	GYM	RUSSO
	QR	TT	12	GYM	STRNAD
	RS	TT	1	GYM	MAKSUD
*	G	MWF	2	GYM	MAKSUD
*	H	MWF	3	GYM	GEDVILAS

P. E. M. 130. Basketball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	RADER
F	MWF	1	GYM	RUSSO
G	MWF	2	GYM	GEDVILAS

P. E. M. 132. Archery. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

PQ	TT	11	GYM	RADER

P. E. M. 136. Badminton. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

LM	TT	8	GYM	VERSEN
MN	TT	9	GYM	NEMOTO
NP	TT	10	GYM	MAKSUD
PQ	TT	11	GYM	BECK
QR	TT	12	GYM	BERRAFATO
RS	TT	1	GYM	RUSSO

P. E. M. 139. Backyard Sports. Credit 1 hour. Skills, knowledge, and conditions.

A	MWF	8	GYM	VERSEN
B	MWF	9	GYM	NEMOTO
MN	TT	9	GYM	BERRAFATO

P. E. M. 140. Boating and Fishing. Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

NP	TT	10	GYM	RADER
QR	TT	12	GYM	SPRINGER

P. E. M. 143. American Square Dance. Credit 1 hour.

G	MWF	2	AUD	THOMAS

P. E. M. 150. Professional Orientation. Credit 2 hours. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors.

D	M	11	74	MAKSUD
	W	11	76	

P. E. M. 153. Fitness Programs. Credit 2 hours. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors.

1 *	A	MTWTF	8/10	GYM	MONTCALM

P. E. M. 154. Swimming. Credit 2 hours. Crawl, back, breast, and side strokes; diving; life saving. To be taken with Physical Education for Men 153.

2 **	A1	MTWTF	8/10	GYM	SPRINGER
2 **	A2	MTWTF	8/10	GYM	KRISTUFEK

P.E.M.155. GYMNASTICS. Credit 1 hour. Tumbling, apparatus stunts.

2 **	A	MTWTF	8/10	GYM	MONTCALM

P.E.M.156. WRESTLING. Credit 1 hour. Wrestling skills.

2 **	A	MTWTF	8/10	GYM	STRNAD

P.E.M.157. TRACK AND FIELD. Credit 1 hour. Track events, field events; rules.

4 ****	A	MTWTF	8/10	GYM	SPRINGER

P.E.M.158. BASEBALL. Credit 1 hour. Baseball skills and rules.

3 ***	A	MTWTF	8/10	GYM	MILLER

P. E. M. 209. History of Sports. Credit 3 hours. Development of sports and physical education in Europe and United States since 1750. For physical education majors only.

F	MWF	1	65	KRISTUFEK

1 * 1st eight weeks only
2 ** 2nd eight weeks only
3 *** 1st four weeks only
4 **** 2nd four weeks only

RECREATION

Recreation 174. Camp Counseling. Credit 3 hours. Objectives, administration, techniques, activity programs, evaluation.

E	MWF	12	65	GEDVILAS

Recreation 176. Principles of Recreation. Credit 3 hours. History of leisure and recreation; concepts of play and recreation; major recreation agencies.

D	MWF	11	GYM	BERRAFATO

PHYSICAL EDUCATION FOR WOMEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

P. E. W. 100, Conditioning Activities. Credit 1 hour.

MN	TT	9	AUD	THOMAS
PQ	TT	11	AUD	PESAVENTO
E	MWF	12	AUD	THOMAS
RS1	TT	1	AUD	MART
RS2	TT	1	AUD	THOMAS
H	MWF	3	AUD	THOMAS
TU	TT	3	AUD	MART

P. E. W. 102. Modified Activities. Credit 1 hour. Prescribed recreational sports, relaxation, and exercise. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUD	ANZALONE

P. E. W. 105. Elementary Rhythms. Credit 1 hour. Beginning dance techniques.

B	MWF	9	AUD	CLAYPOOLE
MN	TT	9	AUD	CLAYPOOLE
C	MWF	10	AUD	CLAYPOOLE
PQ	TT	11	AUD	CLAYPOOLE
QR	TT	12	AUD	MART

P. E. W. 106. Intermediate Rhythms. Credit 1 hour. Intermediate dance techniques, solo and group dance compositions. Prerequisite: Physical Education for Women 105 or consent of instructor.

NP	TT	10	AUD	CLAYPOOLE

P. E. W. 110. Elementary Swimming. Credit 1 hour.

A	MTWTF	8	LAWSON YMCA	ANZALONE

P. E. W. 123. Basketball. Credit 1 hour.

A	MTHF	8	AUD	THOMAS
F	MWF	1	AUD	ANZALONE

P. E. W. 124. Volleyball. Credit 1 hour.

C	MWF	10	AUD	ANZALONE

P. E. W. 130. Badminton. Credit 1 hour. Personal equipment to be furnished by student.

D	MWF	11	AUD	ANZALONE

P. E. W. 136. Tennis. Credit 1 hour. Personal equipment to be furnished by student.

QR	TT	12	AUD	PESAVENTO

P. E. W. 140. Boating and Fishing. Credit 1 hour. Open to students who have completed two semesters of physical education, or consent of instructor.

PQ	TT	11	AUD	THOMAS

P. E. W. 143. American Square Dance. Credit 1 hour.

G	MWF	2	AUD	THOMAS

P. E. W. 144. Elementary Folk Dance. Credit 1 hour.

E	MWF	12	AUD	BARTON

P. E. W. 150. Professional Orientation. Credit 2 hours.

A	MTWT	8	251	PESAVENTO

P. E. W. 151. Body Mechanics, Gymnastics and Hockey. Credit 1 hour. For Physical Education majors.

B	MTWTF	9	AUD	PESAVENTO

P. E. W. 153. Hockey, Soccer and Basketball. Credit 1 hour. For Physical Education majors.

C	MTWTF	10	AUD	PESAVENTO

D A N C E

Dance 235. Folk, Square and Social Dance. Credit 2 hours. For Physical Education majors.

F	MTWTF	1	AUD	CLAYPOOLE

HEALTH EDUCATION

HEALTH EDUCATION 281. FIRST AID. CREDIT 2 HOURS.
Red Cross standard course in first aid.

P	TT	11	AUD	BARTON

PHYSICAL SCIENCE

Phys. Sci. 101. Introduction to the Physical Sciences. Credit 4 hours. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	M	TT	9	205	MELOY
LAB	1	TU	10/1	85	COWIN
QUIZ	1	TH	10	74	COWIN
LAB	2	W	8/11	85	FARAG
QUIZ	2	M	9	76	FARAG
LAB	3	W	11/2	85	HEDBERG
QUIZ	3	F	11	75	HEDBERG
LAB	4	TH	10/1	85	JOHNSON
QUIZ	4	TU	10	74	JOHNSON
LAB	5	W	2/5	85	COWIN
QUIZ	5	F	3	80	COWIN
LAB	6	F	8/11	85	FARAG
QUIZ	6	M	10	74	FARAG
LAB	7	TU	3/6	85	POTEMPA
QUIZ	7	TH	4	76	POTEMPA
LAB	8	F	2/5	85	MELOY
QUIZ	8	M	3	74	MELOY

Phys. Sci. 102. Introduction to the Physical Sciences. Credit 4 hours. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101, or Division of General Studies 141.

LEC	B	WF	9	217	MELOY
LAB	11	M	9/12	85	HEDBERG
QUIZ	11	TH	10	76	HEDBERG
LAB	12	M	1/4	85	COWIN
QUIZ	12	F	1	80	COWIN

Physics 101. General Physics (Mechanics, Heat, Sound). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite: Trigonometry.

LEC	X	TU	11	127	
LEC	Y	TU	1	127	
QUIZ	B1	MWF	9	134	SILKETT
LAB	B	TU	8/11	117	SILKETT
QUIZ	D1	MWF	11	134	SILKETT
LAB	D	TH	3/6	117	SILKETT
QUIZ	E1	MWF	12	134	LIVERMORE
LAB	E	TU	3/6	117	LIVERMORE
QUIZ	F1	MWF	1	134	LIVERMORE
LAB	F	TH	11/2	117	LIVERMORE

Physics 102. General Physics (Electricity, Magnetism, Light, and Modern Physics). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite: Physics 101.

LEC	X	TH	11	127	
QUIZ	D1	MWF	11	144	WILBUR
LAB	D	TH	8/11	122	WILBUR
QUIZ	F1	MWF	1	144	WILBUR
LAB	F	TU	3/6	122	WILBUR

Physics 106. General Physics (Mechanics). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Mathematics 133.

LEC	X	M	10	127	
LEC	Y	M	1	127	
QUIZ	A1	WF	8	134	MORAINE
LAB	A	TU	8/11	123	MORAINE
QUIZ	C1	WF	10	134	MORAINE
LAB	C	TH	8/11	123	MORAINE
QUIZ	G1	WF	2	134	PAPPADEMOS
LAB	G	M	3/6	123	PAPPADEMOS

QUIZ	M1	TT	9	134	HASLETT
LAB	M	F	8/11	123	HASLETT
QUIZ	N1	TT	10	134	SKADELAND
LAB	N	W	8/11	123	SKADELAND
QUIZ	P1	TT	11	134	MORAINE
LAB	P	W	12/3	123	WEISSMAN
QUIZ	Q1	TT	12	134	WEISSMAN
LAB	Q	M	12/3	123	WEISSMAN
QUIZ	R1	TT	1	134	SKADELAND
LAB	R	F	1/4	123	SKADELAND
QUIZ	T1	TT	3	134	PAPPADEMOS
LAB	T	W	3/6	123	PAPPADEMOS

Physics 107. General Physics (Heat, Electricity, Magnetism). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	W	10	127	
LEC	Y	W	1	127	
QUIZ	C1	MF	10	144	ANDERSON
LAB	C	TU	8/11	122	ANDERSON
QUIZ	E1	MF	12	144	RAILSBACK
LAB	E	TU	11/2	122	RAILSBACK
QUIZ	F1	MF	1	113	ANDERSON
LAB	F	TH	11/2	122	ANDERSON
QUIZ	L1	TT	8	134	HASLETT
LAB	L	M	9/12	122	HASLETT
QUIZ	N1	TT	10	144	JOHNSON
LAB	N	M	3/6	122	JOHNSON
QUIZ	P1	TT	11	144	MCNEIL
LAB	P	M	12/3	122	MCNEIL
QUIZ	R1	TT	1	144	MINKLER
LAB	R	F	3/6	122	MINKLER

Physics 108. General Physics (Sound, Light, Modern Physics). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Physics 107 and Mathematics 143.

LEC	X	F	10	127	
LEC	Y	F	1	127	
QUIZ	C1	M	10	134	JOHNSON
		W	10	144	
LAB	C	TU	11/2	124	JOHNSON
QUIZ	L1	TT	8	144	WEISSMAN
LAB	L	M	9/12	124	WEISSMAN
QUIZ	N1	TT	10	113	MINKLER
LAB	N	W	8/11	124	MINKLER
QUIZ	R1	TT	1	113	MINKLER
LAB	R	W	1/4	124	BESS

Physics 321. Theoretical Mechanics. Credit 4 hours. Laws of motion, vectors, statics, energy and momentum principles for a particle and for systems of particles, motion of a particle under constant forces, plane motion of a rigid body, simple harmonic motion and resonance, impact. Prerequisite: General Physics and Calculus.

	D1	MWF	11	210	BESS

Physics 341. Electricity and Magnetism. Credit 4 hours. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Prerequisite: Physics 107 and Calculus.

QUIZ	G1	MWF	2	210	CHANDLER
LAB	G	TH	3/6	210	CHANDLER

Physics 342. Electricity and Magnetism. Credit 4 hours. Continuation of Physics 341. Boundary conditions and special methods in boundary value problems; interpretation of dielectric and magnetic properties of matter from the point of view of atomic and crystalline properties; use of complex notation in circuit problems; coupled circuits; non-linear circuits; transmission lines; radiation from antennas; transmission and reflection of electromagnetic waves. Prerequisite: Physics 341.

QUIZ	B1	MWF	9	210	MCNEIL
LAB	B	TU	8/11	210	MCNEIL

Physics 360. Thermodynamics. Credit 3 hours. The first, second, and third laws of thermodynamics; the properties of the entropy, enthalpy free energy, and internal energy functions; reversible and irreversible processes; applications to homogeneous and hetrogeneous systems; chemical reactions and the mass action law. Prerequisite: General Physics and Calculus.

QUIZ	C1	MWF	10	210	WEISSMAN

POLITICAL SCIENCE

Pol. Sci. 103. Introduction to Political Science. Credit 3 hours. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: Scope and method of political science, constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy.

D1	MWF	11	94	RAKOVE

Pol. Sci. 150. American Government: Organization and Powers. Credit 3 hours. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

F1	MWF	1	94	RAKOVE
G1	MWF	2	96	RAKOVE
P1	TTF	11	13	BARBER
P2	TT	11	24	RAKOVE
	TH	12	24	
R1	TTF	1	37	BARBER
T1	TTF	3	94	BARBER

Pol. Sci. 151. American Government: Functions. Credit 3 hours. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power, regulation of commerce, communications, and busineess; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

N1	M	10	96	RAKOVE
	TT	10	94	

POL.SCI.384. INTERNATIONAL RELATIONS. Credit 3 hours. An examination of the nature of the national state system, of the forces affecting international relations, of the sources of conflicts in international politics, and of their solution. Prerequisite: consent of the instructor.

N1	TTF	10	96	BARBER

Lecture and quiz sections in this course are coordinate. The quiz section must be chosen from the group listed directly under the particular lecture section selected.

Psych. 100. Introduction to Psychology. Credit 4 hours. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

LEC	E	WF	12	213	HOWARD
QUIZ	C1	WF	10	19	HOWARD
QUIZ	H1	WF	3	38	V LIPMAN
QUIZ	L1	TT	8	38	HOWARD
QUIZ	M1	TT	9	22	TYROLER
QUIZ	N1	TT	10	17	HOWARD
QUIZ	P1	TT	11	17	HOWARD
QUIZ	Q1	TT	12	21	TYROLER
LEC	Q	TT	12	205	E LIPMAN
QUIZ	E1	WF	12	38	V LIPMAN
QUIZ	N2	TT	10	23	V LIPMAN
QUIZ	P2	TT	11	21	V LIPMAN
QUIZ	R1	TT	1	24	V LIPMAN
QUIZ	T1	TT	3	21	V LIPMAN

Psych. 125. An Introduction to the Fields of Psychology. Credit 4 hours. An introduction to the basic fields of psychology, including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

LEC	C	WF	10	227	E LIPMAN
QUIZ	M1	TT	9	38	E LIPMAN
QUIZ	N1	TT	10	22	TYROLER
QUIZ	R1	TT	1	21	TYROLER

RHETORIC

Rhetoric 101. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	204	DAVIS
A2	MWF	8	221	
A3	MWF	8	220	GRIEST
A4	MWF	8	226	
A5	MWF	8	222	SMITH
A6	MWF	8	229	I MILLER
B1	MWF	9	206	DAVIS
B2	MWF	9	221	
B3	MWF	9	222	FRIEND
B4	M	9	237	GRIEST
	WF	9	236	
B5	MWF	9	204	
B6	M	9	228	SMITH
	WF	9	212	
C1	MWF	10	204	
C2	MWF	10	237	I MILLER
C3	MW	10	212	ATWOOD
	F	10	222	
C4	M	10	228	HEGIE
	WF	10	208	
C5	MW	10	116	
	F	10	16	
D1	MWF	11	204	COX
D2	MWF	11	206	HARRIS
D3	M	11	226	HEGIE
	WF	11	208	

D4	M	11	229	STRONKS
	WF	11	212	
E1	MWF	12	204	CASSELL
E2	MWF	12	212	DAVIS
E3	MWF	12	233	I MILLER
E4	MWF	12	237	FRIEND
E5	MWF	12	222	HEGIE
E6	M	12	232	STAR
	WF	12	208	
F1	MWF	1	204	GRIEST
F2	MW	1	212	F JOHNSON
	F	1	116	
F3	M	1	228	STRONKS
	WF	1	208	
F4	M	1	230	
	WF	1	218	
G1	MWF	2	204	ATWOOD
G2	MWF	2	202	CASSELL
G3	MWF	2	232	RUDIN
G4	MWF	2	221	F JOHNSON
G5	MWF	2	212	KERWICK
G6	MWF	2	231	SIDNEY
G7	MWF	2	229	HEGIE
G8	MWF	2	230	STAR
H1	MWF	3	204	CASSELL
H2	MWF	3	221	HARRIS
H3	MWF	3	235	SIDNEY
H4	M	3	229	
	WF	3	116	

H5	MWF	3	212	PHILLIPS
J1	MWF	4	204	
J2	MWF	4	116	KERWICK
J3	MWF	4	221	PHILLIPS
J4	MWF	4	232	COX
J5	MWF	4	235	HARRIS
L1	MTT	8	206	
L2	TTF	8	208	BLUM
L3	MTT	8	223	WRIGHT
L4	MTT	8	202	MACKIN
L5	MTT	8	212	TERRILL
M1	MTT	9	202	CARLSON
M2	MTT	9	208	
M3	M	9	214	CHILLAG
	TT	9	221	
M4	MTT	9	212	TERRILL
M5	M	9	229	LEONHARD
	TT	9	222	
M6	M	9	234	MACKIN
	TT	9	220	
M7	TT	9	223	RUNYAN
	F	9	218	
N1	M	10	221	CARLSON
	TT	10	206	
N2	TTF	10	212	BLUM
N3	M	10	214	TIMMIS
	TT	10	220	
N4	M	10	229	
	TT	10	204	

N5	MTT	10	202	WILLETT
N6	MTT	10	208	WRIGHT
N7	M	10	234	CHILLAG
	TT	10	38	
P1	M	11	214	CARLSON
	TT	11	224	
P2	M	11	228	TERRILL
	TT	11	208	
P3	M	11	230	TIMMIS
	TT	11	204	
P4	MTT	11	212	
P5	M	11	235	MACKIN
	TT	11	221	
P6	M	11	237	CHILLAG
	TT	11	113	
Q1	M	12	221	GALLAGHER
	TT	12	206	
Q2	MTT	12	202	WILLETT
Q3	M	12	214	LEONHARD
	TT	12	116	
Q4	M	12	231	
	TT	12	212	
Q5	TT	12	237	RUNYAN
	F	12	74	
Q6	M	12	234	TERRILL
	TT	12	204	
R1	MTT	1	206	GALLAGHER
R2	MTT	1	208	

R3	M	1	229	S MILLER
	TT	1	116	
R4	TTF	1	212	SCHILLER
R5	M	1	214	NICHOLAS
	TT	1	204	
R6	M	1	226	PEYTON
	TT	1	221	
T1	MTT	3	202	LAWSON
T2	MTT	3	208	TIMMIS
T3	MTT	3	116	NICHOLAS
T4	M	3	230	
	TT	3	212	
T5	TTF	3	218	WEISS
T6	M	3	232	J JOHNSON
	TT	3	236	
T7	MTT	3	231	LOVE
T8	M	3	214	S MILLER
	TT	3	207	
U1	MTT	4	231	GALLAGHER
U2	MTT	4	208	NICHOLAS
U3	MTT	4	233	LAWSON
U4	MTT	4	206	LOVE
U5	MTT	4	220	
U6	TTF	4	226	SCHILLER

Rhetoric 102. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	116	
B1	MWF	9	223	VEST
B2	M	9	231	
	WF	9	202	
C1	MWF	10	223	FRIEND
C2	M	10	226	SIDNEY
	WF	10	202	
D1	MWF	11	223	KERWICK
D2	M	11	232	
	WF	11	202	
E1	MWF	12	223	ATWOOD
E2	M	12	235	PHILLIPS
	WF	12	202	
F1	MWF	1	223	
F2	M	1	235	SIDNEY
	WF	1	202	
G1	MWF	2	223	PHILLIPS
G2	MWF	2	208	
H1	MWF	3	223	STAR
J1	MWF	4	223	STAR
N1	TT	10	223	KOGAN
	F	10	14	
N2	TT	10	224	JORDAN
	F	10	236	
P1	TT	11	223	KOGAN
	F	11	37	
P2	MTT	11	202	J JOHNSON

P3	TT	11	110	WEISS
	F	11	116	
Q1	M	12	226	PEYTON
	TT	12	223	
Q2	TTF	12	221	JORDAN
Q3	M	12	229	LOVE
	TT	12	113	
R1	M	1	234	CARLSON
	TT	1	223	
R2	MTT	1	202	TIMMIS
R3	M	1	232	J JOHNSON
	TT	1	110	
T1	M	3	226	PEYTON
	TT	3	223	
U1	MTT	4	202	PEYTON

Rhetoric 133. Principles of Composition. Credit 3 hours. Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

D1	MWF	11	221	RUDIN

Rhetoric 143. Intermediate Expository Writing. Credit 3 hours. Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: A grade of "A" or "B" in Rhetoric 102 or consent of instructor.

F1	MWF	1	221	RUDIN

Rhetoric 151. Business Letter Writing. Credit 3 hours. Study of the correspondent's problems in business and practice in writing letters, with emphasis on organization, persuasion, and presentation from the reader's point of view. For the student whose career will require competence in writing letters. Prerequisite: Rhetoric 101 and 102.

C1	MWF	10	206	OLEKSY
E1	MWF	12	206	OLEKSY
G1	MWF	2	206	OLEKSY
H1	MWF	3	206	OLEKSY
P1	M	11	208	LAWSON
	TT	11	206	
Q1	MTT	12	208	LAWSON

RHET.103. ENGLISH AS A FOREIGN LANGUAGE. NO CREDIT. An intensive review course in basic English structure for foreign students who are inadequately prepared for Rhetoric 101. Prerequisite: Reading knowledge of English and ability to understand instructions; consent of the instructor.

N1	TWTF	10	221	KIRSTEIN

RHET.104. ENGLISH AS A FOREIGN LANGUAGE. NO CREDIT. A continuation of Rhet.103. A rapid and intensive review of basic English structure and a study of more complicated sentence patterns with practice in oral and written composition. For students who are inadequately prepared for Rhetoric 101. Prerequisite: Rhet.103 or consent of instructor.

Q1	TT	12	236	KIRSTEIN
	F	12	22	

RHET.105. ENGLISH AS A FOREIGN LANGUAGE. NO CREDIT. Intensive writing practice, designed to remedy the foreign student's problems in the area of his special difficulties. May be taken concurrently with Rhetoric 101. Prerequisite: Rhetoric 104 or consent of the instructor.

P1	TT	11	236	KIRSTEIN

SOCIAL SCIENCES

Soc. Sci. 111. The Individual in Society. Credit 4 hours. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G	MW	2	213	SPAETH
QUIZ	B1	WF	9	37	WARREN
QUIZ	H1	MW	3	28	SPAETH
QUIZ	M1	TT	9	24	WARREN
QUIZ	P1	TT	11	22	WARREN

Soc. Sci. 113. World Patterns and World Problems. Credit 4 hours. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E	M	12	217	COLBY
QUIZ	F1	M	1	14	CUTSHALL
		WF	1	13	
QUIZ	G1	MWF	2	13	CUTSHALL
QUIZ	M1	MTT	9	14	COLBY
QUIZ	Q1	TTF	12	13	COLBY

Soc. Sci. 116. Family Living. Credit 4 hours. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

LEC	D	WF	11	227	STAFF
QUIZ	B1	WF	9	20	KLASSEN
QUIZ	P1	TT	11	38	E LIPMAN

SOCIOLOGY

Sociol. 100. Introduction to Sociology. Credit 3 hours. Introductory anaylsis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Prerequisite: Sophomore standing.

G1	MWF	2	94	KLASSEN
H1	MWF	3	96	KLASSEN
L1	TT	8	94	CORLEY
	F	8	96	
P1	TT	11	23	CORLEY
	TH	12	23	

Sociol. 130. Society and Individual Development. Credit 3 hours. Nature of person and relation to institutions, social order, and development. Prerequisite: Sociology 100.

C1	MWF	10	94	CORLEY

Sociol. 276. Sociology of the City. Credit 3 hours. Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	251	KLASSEN
E2	MWF	12	76	CORLEY

SPANISH

Spanish 101. Elementary Spanish. Credit 4 hours. For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102

A1	TWTF	8	235	TORT
B1	TWTF	9	235	MARSH
C1	TWTF	10	235	TORT
F1	TWTF	1	235	MARSH
H1	TWTF	3	233	

Spanish 102. Elementary Spanish. Credit 4 hours. Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

B1	TT	9	224	TORT
	WF	9	237	
D1	TWTF	11	235	MARSH

Spanish 103. Intermediate Spanish. Credit 4 hours. Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

B1	TWTF	9	233	SANCHEZ
C1	TWTF	10	230	MARSH
E1	TWTF	12	235	TORT

Spanish 104. Intermediate Spanish. Credit 4 hours. Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

C1	TWTF	10	233	SANCHEZ
F1	TWTF	1	233	

Spanish 113. Elementary Composition and Conversation. Credit 2 hours. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. Prerequisite: Spanish 102 or two years of high school Spanish.

R1	TT	1	94	SANCHEZ

Spanish 201. Introduction to Spanish Literature. Credit 3 hours. Reading of representative authors of Spain. Prerequisite: Spanish 104 or four years of high school Spanish.

P1	TTF	11	233	SANCHEZ

Group Remedial Speech. No credit hours. Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Service. Room 303,

D1	MW	11	300	RIGLER

Speech 101. Principles of Effective Speaking. Credit 3 hours. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	224	ARMOLD
D1	M	11	222	ARMOLD
	WF	11	220	
E1	MWF	12	116	HOVDE
F1	MWF	1	224	PITT
G1	MWF	2	222	CREWS
G2	MWF	2	224	PITT
H1	MWF	3	224	KUNDRAT
J1	MWF	4	220	HOSKINS
J2	MWF	4	224	KUNDRAT
M1	TTF	9	116	HOVDE
N1	MTT	10	222	GOULSON
N2	TTF	10	116	HOVDE
P1	MTT	11	116	HOVDE
Q1	MTT	12	224	PITT
Q2	MTT	12	222	GOULSON
R1	TT	1	220	CREWS
	F	1	222	
T1	MTT	3	222	CREWS
T2	TT	3	224	PITT
	F	3	222	
U1	MTT	4	222	CREWS

Speech 105. Voice and Articulation. Credit 2 hours. A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

D1	M	11	234	HOSKINS
	WF	11	218	
E1	M	12	220	KUNDRAT
	WF	12	224	

Speech 107. Parliamentary Procedure. Credit 2 hours. Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

R1	TT	1	224	PITT

Speech 111. Business and Professional Speaking. Credit 2 hours. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

G1	MW	2	116	HOVDE

Speech 117. Argumentation. Credit 3 hours. Analysis, brief drawing and research; types of evidence, methods of reasoning, and refutation; study of types of debate and a series of speechs and debates upon the current national proposition. Prerequisite: Speech 101; sophomore standing.

(THIS COURSE IS OFFERED IN THE FALL SEMESTER ONLY.)

C1	MWF	10	224	THOMPSON

Speech 141. Oral Interpretation of Literature. Credit 3 hours. Principles of interpretation, analysis, and oral reading of prose literature, dramatic literature, and verse. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	224	ARMOLD
P1	TTF	11	222	CREWS

Speech 161. Fundamentals of Acting. Credit 3 hours. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Credit or commitment registration in Speech 141. II.

R1	MTT	1	222	GOULSON

SPEECH 221. PERSUASION. Credit 3 hours. Study of the nature and methods of attention, suggestion, and motivation as applied to speech-making for the influencing of group opinion and action. Preparation and presentation of short persuasive speeches. Prerequisite: Speech 101; junior standing.

D1	MWF	11	224	THOMPSON

SPEECH FOR FOREIGN STUDENTS
(See also under RHETORIC)

SPEECH 103. SPEECH FOR FOREIGN STUDENTS. NO CREDIT.
A study of the sounds and intonation patterns of American English and the relation of sound to spelling, including drill sessions designed to improve the student's ability to speak and understand English at normal conversational speed. Prerequisite: Reading knowledge of English and ability to understand instructions.

F1	MW	1	116	HOSKINS
	F	1	38	
	TH	3/5	235	

SPEECH 104. SPEECH FOR FOREIGN STUDENTS. NO CREDIT.
Pronunciation of English for students whose native language is not English. A study of the sounds and intonation patterns of American English, designed to improve the student's ability to speak at normal conversational speed. Pronunciation material similar to Speech 103, but for more advanced students. Prerequisite: Speech 103 or consent of instructor.

H1	MWF	3	220	HOSKINS

THEORETICAL AND APPLIED MECHANICS

T. A. M. 150. Analytical Mechanics (Statics). Credit 2 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic states, forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. Prerequisite: Registration in Mathematics 143.

Q1	TT	12	144

T. A. M. 151. Analytical Mechanics (Statics). Credit 3 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Prerequisite: Registration in Mathematics 143.

D1	MWF	11	113
H1	MWF	3	110

T. A. M. 154. Analytical Mechanics (Statics and Dynamics). Credit 4 hours. A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. Prerequisite: Registration in Mathematics 143.

C1	MWTF	10	110
H1	MTWF	3	113

T. A. M. 156. Analytical Mechanics (Statics and Dynamics). Credit 5 hours. A combination of Theoretical and Applied Mechanics 150 and 211. Prerequisite: Registration in Mathematics 143.

E1	MTWTF	12	110

T. A. M. 171. Elements of Mechanics (Statics). Credit 3 hours. Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Prerequisite: Mathematics 123.

G1	MWF	2	110

T. A. M. 172. Strength of Materials. Credit 3 hours. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Prerequisite: Theoretical and Applied Mechanics 171.

G1	MWF	2	113

T. A. M. 211. Analytical Mechanics (Dynamics). Credit 3 hours. Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

B1	MWF	9	113
F1	MWF	1	110

T. A. M. 221. Elementary Mechanics of Deformable Bodies. Credit 3 hours. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

C1	MWF	10	113
H1	MWF	3	134

T. A. M. 223. Mechanical Behavior of Solids. Credit 1 hour. Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	TU	9/11	61
B	TH	12/2	61
D	TU	12/2	61

T. A. M. 224. Behavior of Materials. Credit 3 hours. Introduction to atomic and molecular structure of metals, cement, concrete, plastics, ceramics, and glass; response of these materials to rapid, steady, and repeated loads at various temperatures (and environments) in terms of rheological models; fracture behavior of specific materials, i.e., stress rupture, brittle fracture, and fatigue of metals and concrete. Prerequisite: Theoretical and Applied Mechanics 221.

E1	MWF	12	113

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1960/61
pt.2.

TIME TABLE

SECOND SEMESTER

1960-1961

THE LIBRARY OF THE
1961
UNIVERSITY OF ILLINOIS

UNIVERSITY OF ILLINOIS
Chicago Undergraduate Division
NAVY PIER

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1960/61
pt. 2

TABLE OF CONTENTS

Pre-registration Advisement Schedule..... 2
Instructions for Registration..... 3
Registration Schedule, Second Semester..... 5
Schedule of Tuition and Fees..... 6
Calendar, Second Semester..... 7
Chicago Undergraduate Division Calendar..... 8
Urbana Calendar..... 9
Final Examinations Schedule..... 10
How to Read This Timetable..... 11
Accountancy..... 12
Anthropology..... 13
Architecture..... 13
Art..... 15
Biological Sciences..... 16
Business Law..... 19
Chemistry..... 19
Civil Engineering..... 25
Economics..... 26
Education..... 28
Electrical Engineering..... 28
English..... 29
French..... 31
General Engineering..... 32
Geography..... 34
Geology..... 35
German..... 36
History..... 37
Humanities..... 39
Hygiene..... 39
Management..... 40
Marketing..... 40
Mathematics..... 41
Mechanical Engineering..... 45
Military Sciences and Tactics..... 46
Music..... 46
Philosophy..... 47
Physical Education for Men..... 47
Recreation..... 52
Physical Education for Women..... 52
Physical Sciences..... 54
Physics..... 55
Political Science..... 58
Psychology..... 58
Rhetoric..... 59
Social Sciences..... 65
Sociology..... 66
Spanish..... 67
Speech..... 68
Theoretical and Applied Mechanics..... 70

Student Counseling Service (Reading and Study Skills)..... 71

PRE-REGISTRATION ADVISEMENT SCHEDULE
SECOND SEMESTER 1960-61

PLACE: Second Floor, Lounge, East End

COMMERCE AND ENGINEERING

FORMER STUDENTS ONLY

A - E	Monday, February 6	1 p.m. - 4 p.m.
F - K	Tuesday, February 7	9 a.m. - 12 noon
L - Q	Tuesday, February 7	1 p.m. - 4 p.m.
R - Z	Wednesday, February 8	9 a.m. - 12 noon

LIBERAL ARTS AND SCIENCES

FORMER STUDENTS

A - E	Monday, February 6	1 p.m. - 4 p.m.
F - K	Tuesday, February 7	9 a.m. - 12 noon
L - Q	Tuesday, February 7	1 p.m. - 4 p.m.
R - Z	Wednesday, February 8	9 a.m. - 12 noon

NEW STUDENTS (Liberal Arts and Sciences only)
Wednesday, February 8

A - E.....1 p.m.
F - H.....2 p.m.
I - N.....3 p.m.
O - Z.....4 p.m.

PHYSICAL EDUCATION

No pre-advisement is scheduled for Physical Education majors.

INSTRUCTIONS FOR REGISTRATION

The following instructions are for registration under the IBM punch card plan. To make this plan successful it is essential that every student read and follow carefully all instructions. DO NOT BEND, FOLD, CLIP, BAND OR MUTILATE YOUR REGISTRATION CARDS. Use ink; print plainly.

If PRE-ADVISING, follow steps 1-4. When you have completed Step 4, return your cards to your College office or point designated. These cards will be returned to you at your scheduled registration time at which time you will resume with item 5.

1. Obtain from your college the following materials: Student's Copy of registration; a No. 1 Authorization Card, a No. 2 Dean's Program Card, a No. 3 Recorder's Information Card, and a No. 4 Veteran's Program Card, if applicable.

No. 1 AUTHORIZATION CARD

2. Refer to your No. 1 Authorization Card for your identification number (I.D. Number, upper left corner), hours earned, deficiencies, and college and curriculum. Read carefully the instructions which appear on this card for students.
SPECIAL NOTE: All your IBM cards must be identified by your I.D. number. This should appear on all your cards, but you should not write your name on any of them except the No. 4 Veteran's Program Card, No. 7 Fee Receipt Card, and your Student's copy of Registration.

3. Submit your No. 1 Authorization Card and No. 2 Dean's Program Card to the proper adviser.

No. 2 DEAN'S PROGRAM CARD

4. After the No. 2 card has been made out by your adviser and he has signed it, write your address and telephone number on the front of the No. 2 Dean's Program Card. Turn card over and complete the back in ink. PRINT PLAINLY.

5. Present your No. 1 Authorization Card and No. 2 Dean's Program card at the departmental tables. Obtain a No. 5 Class Card from the department representative for each course listed on your No. 2 Dean's Program Card. You will need only one card for each course. Lecture and/or laboratory cards in addition to quiz cards are not needed. BE SURE TO WRITE YOUR IDENTIFICATION NUMBER ON EACH CLASS CARD issued to you in the box provided (further indicated by arrows) but do not write your name on these cards.

No. 3 RECORDER'S INFORMATION CARD

6. Fill out the No. 3 Recorder's Information Card. Follow carefully instructions on the top and left margin of this card. PRINT PLAINLY.

INSTRUCTIONS FOR REGISTRATION (completed)

7. If a veteran, copy your approved program as it appears on the No. 2 Dean's Program Card on to the No. 4 Veteran's Program Card.

8. At this point you should have completed all of the information needed on the registration cards issued to you and be ready to have your program checked. Be sure your program on YOUR Student's Copy of Registration form agrees with the program on the No. 2 Dean's Program Card as it is approved in final form. Be sure to write in your room numbers on YOUR Student's Copy of Registration. This is the ONLY copy of your registration you will receive.

9. If your name does not agree with that printed on your No. 1 Authorization Card, please present this card to the Chief Clerk for correction BEFORE proceeding further with your registration.

10. Submit cards No. 1, 2, 3, (also 4, Veteran's Program Card, if applicable) and all No. 5 Class Cards in that order to one of the clerks at Station No. 2 and then proceed to Station No. 3 for class card check.

No. 6 FEE CARD and No. 7 IDENTIFICATION CARD

11. Submit all cards to the fee card clerks at Station 4 and obtain a No. 6 Fee Assessment Card and a No. 7 Identification Card. Write your name and address on the No. 7 Identification Card.

12. All veterans stop at Station 5.

13. If there is a question concerning your fees, if you are registered for 4 hours or less in the Summer Session or 8 hours or less in a regular semester, or if there is no No. 6 and 7 card for you at Station 4, go to Station 6.

14. Place cards No. 6 and 7 behind cards No. 1 through 5 and present all cards to a clerk at Station 7. Your cards should be presented in the following sequence: No. 1, 2, 3, 4, (if applicable) and all No. 5 cards, 6, and 7.

15. If you are registering in Military Science, report to Station 8.

16. You are now ready to pay your fees. Present your banded group of cards No. 1, 2, 3, and 5 cards, and No. 6, 7, and 4, (if applicable) to one of the cashiers. The banded group, No. 7 Identification Card, and No. 4 Veteran's Program Card will be returned to you when stamped by the cashier.

17. Submit all cards to a clerk at Station 12. The clerk at the station will return to you your Identification Card. This No. 7 Identification Card is very necessary and must be presented in order to participate in many University functions.

18. From this station proceed to the various stations for your insurance policy, University locker, and other University activities.

Report for classes on the first day at the hours shown on your Student's Copy of Registration form. KEEP THIS FORM WITH YOU AT ALL TIMES.

REGISTRATION SCHEDULE
Second Semester, Spring, 1960-61

PLACE: Second Floor, Lounge, East End

FORMER STUDENTS

Former students paying their tuition and fees after 5:00 p.m., Friday, February 10, 1961, will be assessed a late registration fee of $5.00.

A - B	Thursday, February 9	9:30 a.m.
E - G	Thursday, February 9	1:00 p.m.
H - K	Thursday, February 9	8:30 a.m.
L - M	Thursday, February 9	3:00 p.m.
N - R	Thursday, February 9	2:00 p.m.
S	Thursday, February 9	10:30 a.m.
T - Z	Thursday, February 9	11:30 a.m.
C - D	Friday, February 10	8:30 a.m.

NEW STUDENTS

A - D	Friday, February 10	11:30 a.m.
E - K	Friday, February 10	1:00 p.m.
L - R	Friday, February 10	10:30 a.m.
S - Z	Friday, February 10	9:30 a.m.

Students registering for less than 12 semester hours will register at 2:00 p.m., Friday, February 10.

All University offices will be closed on Saturday, February 11, 1961.

Late Registration will begin on Monday, February 13, 1961.

Instruction will begin on Monday, February 13, 1961.

SCHEDULE OF TUITION AND FEES

TUITION:

Residents of Illinois taking nine hours or more.....$ 75.00
(Eight hours or less pay tuition at the rate of $6.00 a semester hour).

Non-residents of Illinois taking nine hours or more.....$250.00
(Eight hours or less pay tuition at the rate of $20.00 a semester hour).

HOSPITAL AND MEDICAL SERVICE:

Students taking more than five hours.....$ 8.00
(Less than five hours, optional).

LABORATORY, LIBRARY, AND SUPPLY FEE:

Students taking more than eight hours.....$ 12.00
(Less than nine hours $6.00 each semester).

STUDENT ACTIVITIES SERVICE FEE:

Students registered for more than five semester hours.....$ 8.00
(Students taking five hours or less pay no student activity fee).

ALL FEES ARE DUE ON THE DATE OF REGISTRATION

GENERAL DEPOSIT:

All new students, and all former students who were not in attendance at the Chicago Undergraduate Division during the first semester 1960/61 must pay the General Deposit fee of .....$ 5.00

LATE REGISTRATION FEE:

A late registration fee will be charged to any former student who has not paid his tuition and fees on the last day of the regular registration period. The late registration fee of $5.00 will be assessed the first day of late registration, Monday, February 13, 1961

Late registration fee.....$ 5.00

CHICAGO UNDERGRADUATE DIVISION
CALENDAR

Second Semester, Spring, 1961

Fri., Feb. 3 - Wed. Feb. 8	Orientation Period
Thurs., Feb. 9 - Fri., Feb. 10	Registration (Students registering for less than twelve hours report at 1:00 p.m., Friday, February 10, for registration)
Mon., Feb. 13	Instruction begins
Tues., Feb. 14, 9:30 a.m.	Changes to adjust conflicts in program
Thurs., Feb. 16, 1:00 p.m.	Earliest time at which program changes may be made for personal convenience
Fri., Feb. 24, 4:00 p.m.	Latest date for withdrawal with full rebate
Thurs., Mar. 2	University Day (University opened, 1868 - not a holiday)
Wed., Mar. 29, 12:00 noon	Mid-semester grades are due
Thurs., Mar. 30, 6:00 p.m.	Easter Vacation begins
Fri., Mar. 31, 4:00 p.m.	The completion of seven weeks of instruction for the purpose of allowing one-half credit for military withdrawals
Wed., April 5, 8:00 a.m.	Easter Vacation ends
Fri., April 7, 4:00 p.m.	Latest date for withdrawal with one-half rebate
Fri., May 5, 4:00 p.m.	The completion of twelve weeks of instruction for the purpose of allowing full credit for military withdrawals
Thurs., May 11	Students withdrawing on or after this date must petition for readmission
Fri., May 12	Honors Day
Tues., May 30	Memorial Day (Holiday)
Thurs., June 1	Last day of instruction
Fri., June 2 - Fri., June 9	Semester Examinations

UNIVERSITY OF ILLINOIS
CHICAGO UNDERGRADUATE DIVISION

ACADEMIC CALENDAR 1961

Second Semester (Spring 1961)

Feb. 3, Fri. - Feb. 8, Wed.	Orientation Period
Feb. 9, Thurs. - Feb. 10, Fri.	Registration
Feb. 13, Mon.	Instruction begins
March 2, Thurs.	University Day (University opened, 1868 - not a holiday)
March 30, Thurs., 6 p.m.	Easter Vacation begins
April 5, Wed., 8 a.m.	Easter Vacation ends
May 12, Fri.	Honors Day
May 30, Tues.	Memorial Day (Holiday)
June 2, Fri. - June 9, Fri.	Semester Examinations

Summer Session 1961

June 23, Fri.	Registration
June 26, Mon.	Instruction begins
July 4, Tues.	Independence Day (Holiday)
Aug. 18, Fri.	Summer Session Examinations

First Semester (Fall 1961)

Sept. 5, Tues. - Sept. 13, Wed.	Orientation period
Sept. 14, Thurs. - Sept. 15, Fri.	Registration
Sept. 18, Mon.	Instruction begins
Oct. 21, Sat.	Chicago Undergraduate Division opened 1946
Nov. 22, Wed., 6 p.m.	Thanksgiving Vacation begins
Nov. 27, Monday, 8 a.m.	Thanksgiving Vacation ends
Dec. 3, Sun.	Illinois Day (State admitted to the Union, 1818)
Dec. 15, Fri., 6 p.m.	Christmas Vacation begins
Jan. 2, Tues., 8 a.m.	Christmas Vacation ends
Jan. 19, Fri., - Jan. 26, Fri.	Semester examinations

UNIVERSITY OF ILLINOIS
URBANA

ACADEMIC CALENDAR 1961

Second Semester (Spring 1961)

Jan. 31, Tues. - Feb. 3, Fri.	Entrance Examinations
Feb. 6, Mon. - Feb. 8, Wed.	Registration
Feb. 9, Thurs.	Instruction begins
Mar. 2, Thurs.	University Day (University opened, 1868)
Mar. 29, Wed., 5 p.m.	Spring Vacation begins
Apr. 4, Tues., 8 a.m.	Spring Vacation ends
May 5, Fri.	Honors Day (Classes dismissed at noon)
May 30, Tues.	Memorial Day (Holiday)
May 30, Tues.	Study Day
May 31, Wed. - June 8, Thurs.	Semester Examinations
June 17, Sat.	Commencement Exercises

Summer Session 1961

June 6, Tues. - June 9, Fri.	Entrance Examinations
June 19, Mon.	Registration
June 20, Tues.	Instruction begins
July 4, Tues.	Independence Day (Holiday)
Aug. 11, Fri. - Aug. 12, Sat.	Summer Session Examinations

First Semester (Fall 1961)

Sept. 5, Tues. - Sept. 8, Fri.	Entrance Examinations
Sept. 11, Mon. - Sept. 16, Sat.	Freshman Week and Registration
Sept. 18, Mon.	Instruction begins
Nov. 22, Wed., 1 p.m.	Thanksgiving Vacation begins
Nov. 27, Mon., 1 p.m.	Thanksgiving Vacation ends
Dec. 3, Sun.	Illinois Day (State admitted to the Union, 1818)
Dec. 20, Wed., 1 p.m.	Christmas Vacation begins
Jan. 3, Wed. 1 p.m.	Christmas Vacation ends
Jan. 17, Wed.	Study Day, classes dismissed
Jan. 18, Thurs. - Jan. 26, Fri.	Semester examinations

FINAL EXAMINATIONS SCHEDULE, II 1960-61
June 2 through June 9, 1961

Except for combined section examinations, to be announced, all examinations will be given in accordance with the following program.

Classes meeting at	Classes having at least ONE session on Weds. will be examined at: 9 a.m. to 11 a.m.	Classes having NO session on Weds. will be examined at: 12 noon to 2 p.m.	All classes meeting at 8, 2, or 4 will be examined at: 3 p.m. to 5 p.m.
8 a.m.	_____	_____	Thurs. June 8
9 a.m.	Tues. June 6	Tues. June 6	_____
10 a.m.	Weds. June 7	Weds. June 7	_____
11 a.m.	Thurs. June 8	Thurs. June 8	_____
12 a.m.	Fri. June 9	Fri. June 9	_____
1 p.m.	Fri. June 2	Fri. June 2	_____
2 p.m.	_____	_____	Fri. June 9
3 p.m.	Mon. June 5	Mon. June 5	_____
4 p.m.	_____	_____	Weds. June 7

Combined Section Examinations from 3 p.m. to 5 p.m. on:

Friday, June 2

Monday, June 5

Tuesday, June 6

HOW TO READ THIS TIMETABLE

LISTING OF COURSES

The arrangement of courses in this Time Table is alphabetically by names of departments (See Table of Contents on page 1). The courses offered by each department are listed numerically, in groups with headings to indicate the student for whom they are designed. Following the title of each course is a statement of the requirements, if any, for admission to the course.

LEGEND FOR SECTION LETTERS*

Hour	MWF, MTWTF, TWTF	TT, MTT, TTF
8	A	L
9	B	M
10	C	N
11	D	P
12	E	Q
1	F	R
2	G	S
3	H	T
4	J	U
5	K	W

*Note: This does NOT apply to lecture and laboratory sections in Art, Architecture, Engineering Sciences, and Military Science and Tactics.

The information contained in the various columns under each course description is:

Column 1: Type of section--lecture, laboratory, quiz. (This column will not appear in all instances.)

Column 2: Section number. (See Legend above.)

Column 3: Day(s) of the week on which the section meets.

Column 4: Hour(s) of the day at which the section meets.

Column 5: Room(s) in which the section meets.

Column 6: Instructor(s) of the section.

ACCOUNTANCY

Accy. 101. Principles of Accounting. Credit 3 hours. Beginners' course. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	21	ANDREWS
C1	MWF	10	21	ANDREWS
D1	MWF	11	23	SCHNEIDER
F1	MWF	1	38	LIPKIN
G1	MWF	2	22	SCHNEIDER
H1	MWF	3	22	SCHNEIDER
J1	MWF	4	38	LIPKIN
M10	TT	9	21	OSSMAN
	F	9	20	
P1	MTT	11	19	HEDISH
R1	MTT	1	22	HEDISH
R2	MTT	1	20	OSSMAN
T1	MTT	3	17	OSSMAN

Accy. 105. Accounting Procedure. Credit 3 hours. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting, business forms and records; payroll accounting; single entry; financial statement analysis. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

B1	MWF	9	38	FOX
C1	MWF	10	38	KABBES
C2	MWF	10	20	LIPKIN
D1	MWF	11	38	KABBES
E1	MWF	12	24	FOX
F1	MWF	1	21	ANDREWS
G1	MWF	2	21	ANDREWS
G2	MWF	2	38	FOX
H1	MWF	3	38	LIPKIN
P10	TT	11	20	OSSMAN
	F	11	21	
T1	MTT	3	20	HEDISH
U1	MTT	4	20	HEDISH

Accy. 106. Elementary Cost Accounting. Credit 3 hours. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. Prerequisite: One year of accountancy; sophomore standing.

B1	MWF	9	23	MALINOSKY
D1	MWF	11	22	MALINOSKY
G1	MWF	2	23	KABBES
H1	MWF	3	23	KABBES

Accy. 108. Intermediate Accounting. Credit 3 hours. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. Prerequisite: One year of accountancy; sophomore standing.

C1	MWF	10	23	SCHNEIDER
E1	MWF	12	22	MALINOSKY
G1	MWF	2	20	MALINOSKY

ANTHROPOLOGY

Anthrop. 103. Introduction to Anthropology; The Growth of Culture. Credit 4 hours. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. This course with Anthropology 102 satisfies the social science requirement in Liberal Arts and Sciences.

E1	MTWT	12	28	WARREN
F1	MTWT	1	28	WARREN
H1	MTWT	3	28	WARREN

ARCHITECTURE

Arch. 101. Introduction to Architecture. Credit 3 hours. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. Prerequisite: Credit or registration in General Engineering 107.

LEC	C	W	10	251
LAB	A	MTTF	8/10	241
LAB	B	MTTF	10/12	241
LAB	C	MTTF	12/2	241
LAB	D	MTTF	3/5	241

Arch. 113. History of Ancient Architecture. Credit 2 hours. A description and analysis of the development of the architecture of the ancient East, Greece and Rome, related to the environmental and cultural setting. Prerequisite: Architecture 131 or sophomore standing.

LEC	E	MF	12	251

Arch. 131. Architectural Design. Credit 3 hours. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. Prerequisite: Sophomore standing, Arch. 101, credit in G.E. 108, and registration in Arch. 141.

LEC	G	W	2	251
LAB	A	TT	8/11	241
		W	9/11	241
LAB	B	MF	3/6	241
		W	3/5	241

Arch. 132. Architectural Design. Credit 3 hours. Continued study of the fundamentals of architectural design. Prerequisite: Architecture 131.

LEC	D	W	11	251
LAB	A	MF	8/11	242
		W	9/11	242
LAB	B	W	3/5	242
		TT	3/6	242

Arch. 141. Materials and Methods of Construction I. Credit 2 hours. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Prerequisite: Registration in Architecture 131, and credit in G.E. 108.

LEC	G	MF	2	251

Arch. 142. Materials and Methods of Construction II. Credit 2 hours. Nonfire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. Prerequisite: Architecture 141.

LEC	D	MF	11	251

Arch. 214. History of Medieval Architecture. Credit 3 hours. A description and analysis of the development of medieval architecture in Europe and the East related to the environmental and cultural setting. Prerequisite: Architecture 113 or consent of instructor.

LEC	F	MWF	1	251

Arch. 233. Architectural Design. Credit 3 hours. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. Prerequisite: Architecture 132, credit or registration in T.A.M. 150 or 171, and registration in Arch. 241.

LAB	A	MWF	8/11	242
LAB	B	MWF	3/6	242

Arch. 241. Materials and Methods of Construction III. Credit 2 hours. Semifireproof construction, manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. Prerequisite: Architecture 142 and registration in Arch. 233.

LEC	R	TT	1	251

Art 112. Introduction to Renaissance and Modern Art. Credit 3 hours. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies begining with the Italian Renaissance and continuing through the modern period.

LEC	H	MWF	3	251

Art 115. Art Appreciation. Credit 3 hours. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students.

LEC	B	MWF	9	251

Art 117. Drawing I. Credit 3 hours. Theory and practice in the elements of drawing.

LAB	A	MWF	11/2	84

Art 118. Drawing II. Credit 2 hours. Continuation of Art 117. Prerequisite: Art 117.

LAB	A	TT	11/2	84
LAB	B	TT	11/2	83

Art 119. Design. Credit 2 hours. Theory and practice in the elements of design.

LAB	A	TT	8/11	243

Art 120. Design. Credit 3 hours. Continuation of Art 119. Prerequisite: Art 119.

LAB	A	MWF	8/11	243
LAB	B	MWF	11/2	243

Art. 181. Freehand Drawing. Credit 2 hours. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture.

LAB	A	MWF	8/10	83
LAB	B	MWF	10/12	83
LAB	C	MWF	1/3	83
LAB	D	MWF	3/5	83

Art 182. Freehand Drawing. Credit 2 hours. Continuation of Art 181. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture. Prerequisite: Art 181.

LAB	A	TT	11/2	91
LAB	B	TT	3/6	91
LAB	C	MWF	8/10	91
LAB	D	MF	10/1	91

Art 183. **Freehand Drawing. Credit 2 hours.** Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art 182.

LAB	A	MF	8/11	84	
LAB	B	TT	3/6	83	

Art 184. **Freehand Drawing. Credit 2 hours.** Continuation of Art 183. Charcoal drawing from the cast; water color. Primarily for students in architecture. Prerequisite: Art. 183.

LAB	A	TT	8/11	84	
LAB	B	MF	3/6	84	

Art 281. **Freehand Drawing. Credit 2 hours.** Arrangement of form and color. rhythm and sequence, harmony, and contrast; charcoal, pen, pencil, and water color drawing from cast and still life; outdoor sketching. Primarily for students in architecture. Prerequisite: Art 184.

LAB	A	TT	8/11	83	
LAB	B	TT	3/6	84	

BIOLOGICAL SCIENCES

Biology 101. Fundamentals of Biology. Credit 4 hours. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	C	MW	10	213	SPIRAKIS
LAB	1	TT	3/5	48	APPLEGATE
LAB	2	TT	8/10	46	BOND
LAB	3	TT	10/12	46	BOND
LAB	4	TT	8/10	48	BERGER
LAB	5	TT	10/12	48	CLAAR
LEC	M	TT	9	213	PRESLEY
LAB	6	MW	10/12	46	PRESLEY
LAB	7	MW	8/10	46	PRESLEY
LAB	8	MW	2/4	46	CLAAR
LAB	9	MW	12/2	46	CLAAR
LAB	10	TT	12/2	48	APPLEGATE
LAB	11	MW	4/6	46	PERELMUTER

LEC	E	WF	12	213	NEWELL
LAB	12	WF	8/10	48	BERGER
LAB	13	WF	10/12	48	ROUFFA
LAB	14	TT	12/2	46	BERGER
LAB	15	WF	2/4	48	APPLEGATE
LAB	16	WF	4/6	48	APPLEGATE
LAB	17	TT	3/5	46	NEWELL

Biology 102. Fundamentals of Biology. Continued. Credit 4 hours. Application of biological principles to the living world. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	Q	TT	12	213	NEWELL
LAB	37	W	10/12	45	NEWELL
		F	10/12	41	
LAB	38	M	8/10	45	TAXEY
		F	8/10	41	
LAB	39	TT	8/10	45	TAXEY
LAB	40	WF	8/10	45	BOND
LAB	41	TT	3/5	45	SARKISSIAN
LAB	42	WF	12/2	45	BOND
LAB	43	WF	4/6	45	SCUDDER
LEC	P	TT	11	213	PRESLEY
LAB	44	TT	3/5	41	BERGER
LAB	45	TT	12/2	41	CLAAR
LAB	46	MW	12/2	41	DEMBSKI
LAB	47	MW	2/4	41	DEMBSKI
LAB	48	M	2/4	45	SARKISSIAN
		F	2/4	41	
LAB	49	M	12/2	45	SARKISSIAN
		F	12/2	41	

Biology 111. General Botany. Credit 4 hours. The basic principles of plant structure, growth, physiology, reproduction, evolution and distribution, with special emphasis upon the role of the plant kingdom in the cycles of nature and human life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Placement or consent of the instructor. Credit will not be given for Biol. 111 in addition to Biol. 101 or D.G.S. 131.

LEC	G	MW	2	217	GLASSMAN
LAB	50	MW	12/2	48	GLASSMAN

Biology 115. Introductory Systematic Botany (Plant Taxonomy). Credit 4 hours. Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures and laboratory. Prerequisite: Biology 102 or 111.

LEC	C	WF	10	44	GLASSMAN
LAB	52	WF	8/10	44	GLASSMAN

Biology 120. The Plant Kingdom. Credit 4 hours. An introductory study of the life histories of plants representative of algae, fungi, ferns, and seed plants. Prerequisite: Biology 111 or 102, or Biology 101, with a grade of "B" or higher.

LEC	M	TT	9	65	ROUFFA
LAB	54	TT	10/12	45	ROUFFA

Biology 121. Microbiology. Credit 4 hours. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. Prerequisite: Biology 102 or consent of instructor.

LEC	N	TT	10	217	MADISON
LAB	60	MW	10/12	41	MADISON

Biology 126. Advanced General Bacteriology. Credit 4 hours. General technic, special apparatus and methods. Lectures and laboratory. Prerequisite: Biology 121, credit or registration in Chemistry 105. II.

LEC	L	TT	8	14	MADISON
LAB	62	MW	8/10	41	MADISON

Biology 131. General Zoology. Credit 4 hours. A survey of the animal kingdom. The structures, functions, life history, adaptations, classification and evolutionary relationships of animals. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 111.

LEC	B	WF	9	217	SHOMAY
LAB	70	MF	10/12	45	SCUDDER
LAB	71	TT	12/2	45	TAXEY
LAB	72	WF	2/4	45	SANGSTER

Biology 132. Comparative Vertebrate Anatomy. Credit 5 hours. Classification and comparative anatomy of vertebrates, including functions of their organs and organ systems. Lectures and laboratory. Prerequisite: Biology 102 or 131, or Biology 101 with a grade of "B" or higher.

LEC	D	MWF	11	217	SHOMAY
LAB	73	MWF	8/10	43	DEMBSKI
LAB	74	TT	11/2	43	SARKISSIAN
LAB	75	TT	3/6	43	PERELMUTER

Biology 141. Vertebrate Physiology. Credit 4 hours. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 102; or Biology 101 with a grade of "B" or higher.

LEC	L	TT	8	16	SPIRAKIS
LAB	80	TH	9/12	41	SPIRAKIS
QUIZ	80	TU	9	41	SPIRAKIS

Biology 333. Vertebrate Embryology. Credit 5 hours. The development of the vertebrate body and its organs. Lectures and laboratory. Prerequisite: Biology 132, junior standing.

LEC	F	MWF	1	217	SANGSTER
LAB	78	MWF	2/4	43	SCUDDER
LAB	79	MWF	10/12	43	TAXEY

BUSINESS LAW

Business Law 100. Basic Principles of Business Law. Credit 3 hours. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. Prerequisite: Accountancy 105; Economics 102; 45 credit hours.

	D1	MWF	11	24	FOX

CHEMISTRY

Chem. 101. General Chemistry. Credit 5 hours. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	N	TT	10	205	STEINER
LAB	1	MWF	8/10	50	DAFLER
QUIZ	1	TT	9	80	DAFLER
LAB	2	MWF	10/12	50	STEINER/JOHNSON
QUIZ	2	TT	11	74	STEINER
LAB	3	MWF	1/3	50	STEINER/BABLER
QUIZ	3	TT	1	74	STEINER

LAB	4	MWF	3/5	50	
QUIZ	4	TT	4	74	
LAB	5	MTT	8/10	50	SEABRIGHT/PARE
QUIZ	5	WF	8	76	SEABRIGHT

Chem. 102. General Chemistry. Credit 3 hours. For students who have had one year of high school chemistry, and whose preparation is adequate as indicated by placement examination. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

LEC	C	WF	10	205	MUELLER
LAB	11	TU	8/10	53	MUELLER
QUIZ	11	WF	8	75	MUELLER
LAB	12	W	1/3	53	MUELLER
QUIZ	12	TT	10	76	MUELLER
LAB	13	F	12/2	53	MUELLER
QUIZ	13	TT	12	76	MUELLER
LAB	14	M	1/3	53	HEDBERG
QUIZ	14	WF	1	75	HEDBERG
LAB	15	M	12/2	53	CARBONARO
QUIZ	15	TT	12	75	CARBONARO
LAB	16	M	10/12	53	HERZOG
QUIZ	16	WF	11	76	HERZOG
LAB	17	TU	3/5	53	POTEMPA
QUIZ	17	WF	3	74	POTEMPA
LAB	18	TU	10/12	53	JOHNSON
QUIZ	18	WF	11	74	JOHNSON

Chem. 103. General Chemistry. Credit 4 hours. For engineering students who have had no chemistry or whose preparation is inadequate for Chemistry 102. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

LEC	P	TT	11	205	KLAAS
LAB	21	MW	8/10	50	FARAG
QUIZ	21	TT	8	75	FARAG
LAB	22	MW	1/3	50	KLAAS
QUIZ	22	TT	3	76	KLAAS

LAB	23	MW	10/12	50	ALSCHULER
QUIZ	23	TT	1	80	ALSCHULER
LAB	24	TT	3/5	50	HERZOG
QUIZ	24	WF	3	75	HERZOG
LAB	25	TT	9/11	50	HEDBERG
QUIZ	25	MW	8	74	HEDBERG
LAB	26	TT	12/2	50	COWIN
QUIZ	26	MW	2	75	COWIN

Chem. 104. Chemistry of the Metallic Elements. Credit 4 hours. Limited to students in engineering curricula. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105, 106, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	D	WF	11	205	JONES
LAB	31	TT	9/11	50	SACKHEIM
QUIZ	31	MF	10	74	SACKHEIM
LAB	32	TT	10/12	50	JONES
QUIZ	32	TT	9	74	JONES
LAB	33	TT	12/2	50	PERRY
QUIZ	33	WF	12	74	PERRY
LAB	34	WF	1/3	50	JONES
QUIZ	34	WF	3	80	JONES
LAB	35	TT	3/5	50	CARBONARO
QUIZ	35	WF	2	74	CARBONARO
LAB	36	TT	8/10	50	PERRY
QUIZ	36	WF	10	75	PERRY
LEC	N	TT	10	213	SCHRAGE
LAB	42	WF	8/10	50	SACKHEIM
QUIZ	42	TT	8	74	SACKHEIM
LAB	43	MW	10/12	50	KLAAS
QUIZ	43	TT	9	76	KLAAS

LAB	44	MW	12/2	50	SACKHEIM
QUIZ	44	TT	12	74	SACKHEIM
LAB	45	MF	2/4	50	PERRY
QUIZ	45	TT	3	74	PERRY
LAB	46	WF	1/3	50	BACHRACH/SCHRAGE
QUIZ	46	TT	11	75	BACHRACH

Chem. 105. Inorganic Chemistry and Qualitative Analysis. Credit 5 hours. For students who are not eligible for Chemistry 104 or 106. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

Lecture and laboratory sections in this course are coordinate. The laboratory section must be chosen from the group listed directly under the particular lecture section selected.

LEC	E	WF	12	227	HUNT
LAB	50	MWF	8/10	53	LOTHIAN
QUIZ	50	TT	8	80	LOTHIAN
LAB	51	MWF	10/12	53	PARE
QUIZ	51	MW	9	75	PARE
LAB	52	MWF	1/3	53	PARE/BACHRACH
QUIZ	52	TT	1	75	PARE
LAB	53	TT	9/12	53	HUNT/MANSFIELD
QUIZ	53	WF	10	80	HUNT
LAB	54	MWF	2/4	53	HUNT
QUIZ	54	TT	3	80	HUNT
LEC	Q	TT	12	227	COLEMAN
LAB	55	MWF	9/11	53	HEDBERG
QUIZ	55	WF	12	75	HEDBERG
LAB	56	MWF	11/1	53	COLEMAN
QUIZ	56	MW	1	74	COLEMAN
LAB	57	MWF	12/2	53	LOTHIAN
QUIZ	57	TT	1	76	LOTHIAN
LAB	58	TT	10/12	53	GOTTLIEB
		F	11/1	53	SCHRAGE
QUIZ	58	MW	12	80	DAFLER

LAB	59	TT	9/12	53	SEABRIGHT
QUIZ	59	MW	1	76	SEABRIGHT

Chem. 106. Inorganic Chemistry. Credit 5 hours. Metallic elements. For students in curricula in chemistry, chemical engineering, and chemistry majors who are not premedical students. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104, 105, 108 or 109. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

LEC	H	WF	3	205	RIETZ
LAB	61	MWF	1/3	50	HERZOG
QUIZ	61	TT	11	76	HERZOG
LAB	62	TT	3/6	50	RIETZ
QUIZ	62	WF	4	74	RIETZ

Chem. 108. General Chemistry and Qualitative Analysis. Credit 5 hours. For students in curricula in chemistry or chemical engineering. Students with 95 or more credit hours receive only 3 hours credit. Credit is not granted to students who have received credit in Chemistry 104, 105, 106 or 109. Prerequisite: Chemistry 107.

LEC	M	TT	9	217	WELDON
LAB	66	MWF	9/11	53	CARBONARO
QUIZ	66	TT	10	75	CARBONARO
LAB	67	MWF	1/3	53	ALSCHULER
QUIZ	67	TT	3	75	ALSCHULER
LAB	68	TTF	11/1	53	DAFLER
QUIZ	68	MW	11	75	DAFLER
LAB	69	TT	11/2	53	WELDON
QUIZ	69	WF	9	80	WELDON

Chem. 109. General and Inorganic Chemistry. Credit 5 hours. A course in general chemistry and the chemistry of the elements and inorganic compounds, completing in one semester the work usually taken in two. Limited to students in the engineering and physics curricula. Not open to students who have college credit in chemistry. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Open only to students in the top quarter of their graduating class who qualify on the Chemistry Placement Test and are placed in Mathematics 112 or above.

LEC	F	MWF	1	213	HUITEMA
LAB	71	TU	10/1	50	HUITEMA
QUIZ	71	MW	10	76	HUITEMA
LAB	72	TH	9/12	50	LOTHIAN
QUIZ	72	WF	9	74	HUITEMA

Chem. 110. Qualitative Analysis. Credit 5 hours. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students who major in chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. Prerequisite: Chemistry 106 or equivalent.

LEC	T	TT	3	213	MANSFIELD
LAB	76	M	10/12	53	MANSFIELD
		WF	9/12	53	
QUIZ	76	WF	3	76	MANSFIELD

Chem. 122. Elementary Quantitative Analysis. Credit 5 hours. Gravimetric and volumetric analysis, stoichiometrical relations, practical application. Prerequisite: Chemistry 105 or equivalent.

LEC	Q	TT	12	217	BABLER
LAB	81	MWF	8/11	54	BABLER
QUIZ	81	TH	9	75	BABLER
LAB	82	MWF	3/6	54	SAVOY
QUIZ	82	M	12	74	BABLER

Chem. 124. Quantitative Analysis. Credit 5 hours. For all students in the chemistry curriculum and chemical engineering. Prerequisite: Chemistry 108, 110 or equivalent.

LEC	T	TT	3	205	GOTTLIEB
LAB	86	MWF	12/3	54	GOTTLIEB
QUIZ	86	TU	12	80	GOTTLIEB

Chem. 132. Elementary Organic Chemistry. Credit 3 hours. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354 or 355. Beginning course in organic chemistry especially for students in the prenursing curriculum. Prerequisite: Chemistry 101, 102, 109 or equivalent.

LEC	E	WF	12	65	WELDON
LAB	90	TH	9/12	52	ALSCHULER
QUIZ	90	TU	10	74	ALSCHULER

Chem. 133. Elementary Organic Chemistry. Credit 5 hours. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Prerequisite: Chemistry 105 or equivalent.

LEC	E	MW	12	217	CRUM
EXAM	EX	F	12	217	
LAB	91	TT	9/12	52	CRUM
QUIZ	91	M	9	74	CRUM
LAB	92	WF	2/5	52	CRUM/MELOY
QUIZ	92	M	2	74	CRUM
LAB	93	WF	9/12	52	SEABRIGHT
QUIZ	93	M	10	75	SEABRIGHT

Chem. 234. Organic Chemistry. Credit 5 hours. For students whose major is chemistry, or for those registered in the curriculum in chemistry or chemical engineering. Prerequisite: Chemistry 124.

LEC	R	TT	1	217	BACHRACH
LAB	96	MW	9/12	52	BACHRACH
QUIZ	96	F	10	76	BACHRACH

Chem. 247. Elementary Physical Chemistry. Credit 4 hours. For premedical students and others not in chemistry and engineering curricula. Lectures and laboratory. Prerequisite: Chemistry 122 and 133; Physics 102 or equivalent.

LEC	C	MWF	10	217	SCHRAGE
LAB	98	TU	3/6	50A	SCHRAGE

CIVIL ENGINEERING

C. E. 210. Properties of Soils. Credit 3 hours. Identification and classification of earth materials; hydraulic and mechanical properties of soils; character of natural soil deposits; and appraisal of methods of subsurface exploration. Laboratory determination of the index properties of soils. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221, Geology 150, and junior standing in engineering or architecture.

LEC	B1	MF	9	63	BERATAN
LAB	B	TU	11/2	61	BERATAN

C. E. 214. Composition and Properties of Concrete. Credit 2 hours. Properties and uses of cements, aggregates, mixing water, and admixtures; composition and properties of concrete mixtures; field practices in the production of concrete. Laboratory practice in the design and control of quality concrete. Prerequisite: Theoretical and Applied Mechanics 223 or 224, and junior standing in engineering or architecture, or consent of instructor.

LAB	A	TT	9/11	63	COE

C. E. 215. Engineering and Construction Economy. Credit 3 hours. An introduction to engineering and construction economy; fundamentals of engineering and construction costs; engineering and construction economy studies; and mathematics of finance. Prerequisite: Junior standing.

LEC	G1	MWF	2	63	COE

C. E. 261. Theory of Determinate Structures. Credit 3 hours. A study of the fundamental theory of statically determinate structures with applications to the evaluation of reactions, shears, and moments in beams and stresses in trusses for fixed and moving loads; introduction to deflection computations. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

LEC	E1	MWF	12	63	GERSTNER

Econ. 100. Introduction to Business. Credit 3 hours. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only.

C1	MWF	10	17	DICKETT
D1	MWF	11	16	ALHADEFF
F1	MWF	1	17	DICKETT
H1	MWF	3	24	ALHADEFF
M1	MTT	9	20	GELDARD
P1	MTT	11	21	GELDARD
T1	MTT	3	21	FERRERA
U1	MTT	4	21	FERRERA

Econ. 102. Principles of Economics I. Credit 3 hours. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. Prerequisite: One year of college work.

B1	MWF	9	22	SHAW
C1	MWF	10	22	SHAW
E1	MWF	12	19	MILLER
F1	MWF	1	19	MILLER

Econ. 103. Principles of Economics II. Credit 3 hours. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. Prerequisite: Economics 102.

B1	MWF	9	24	GILLETT
E1	MWF	12	38	DERRICK
Q1	MTT	12	23	SHAW
R1	MTT	1	23	SHAW

Econ. 108. Elements of Economics. Credit 3 hours. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. Prerequisite: One year of college work. Not open to those who have had Economics 102 or 103.

D1	MWF	11	33	DUNNE
F1	MWF	1	33	DUNNE
G1	MWF	2	17	DICKETT
J1	MWF	4	24	DICKETT
P1	MTT	11	17	SELTZER
Q1	MTT	12	17	SELTZER

Econ. 136. American Economic History. Credit 3 hours. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. Open to freshmen and sophomores only.

C1	MWF	10	19	CRABB
D1	MWF	11	20	FERRERA
E1	MWF	12	20	FERRERA
G1	MWF	2	19	CRABB
G2	MWF	2	16	GELDARD
H1	MWF	3	16	CRABB
J1	MWF	4	23	GELDARD
M1	MTT	9	16	MILLER
N1	MTT	10	16	MILLER
T1	MTT	3	19	SELTZER
U1	MTT	4	19	SELTZER

Econ. 138. European Economic History. Credit 3 hours. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. Open to freshmen and sophomores only.

E1	MWF	12	21	CRABB

Econ. 170. Elements of Statistics. Credit 3 hours. Method of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. Prerequisite: Economics 102 or 108; Sophomore standing.

QUIZ	C1	MW	10	33	DERRICK
LAB	1	F	9/11	33	DERRICK
QUIZ	G1	MW	2	33	DERRICK
LAB	2	F	2/4	33	DERRICK
QUIZ	M1	MTU	9	33	LARSON
LAB	3	TH	9/11	33	LARSON
QUIZ	Q1	MTU	12	33	LARSON
LAB	4	TH	12/2	33	LARSON

EDUCATION

Ed. 101. Nature of the Teaching Profession. Credit 2 hours. An orientation course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher.

M1	TT	9	19	RICKS
N1	TT	10	22	SHALABI
Q1	TT	12	19	RICKS
D1	MW	11	37	SHALABI

Ed. 109. Educational Psychology. Credit 3 hours. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. Prerequisite: Psychology 100.

P10	TT	11	28	RICKS
	F	11	14	

Ed. 201. Foundations of American Education. Credit 2 hours. A study of contemporary American public education in the setting of current American culture; confusions and issues with respect to the school program, its purposes, its content, its methods, and its organization are related to confusions and issues with respect to social, economic, and political purposes and organizations, both domestic and international. An attempt is made through the study of these relationships to clarify the contemporary social functions of the American school and teaching profession. Prerequisite: Psychology 100; Education 101.

F1	MW	1	94	SHALABI
H1	MW	3	96	SHALABI
R1	TT	1	24	SHALABI

ELECTRICAL ENGINEERING

E. E. 126. Electric Circuits and Fields. Credit 4 hours. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. Prerequisite: Physics 107; Mathematics 143; credit or registration in Mathematics 345.

QUIZ	D1	MWF	11	144
LAB	D	TU	9/12	120
QUIZ	H1	MWF	3	134
LAB	H	TH	3/6	120

English 101. Introduction to Poetry. Credit 3 hours. Understanding of poetry through the reading and discussion of representative poems. Students with 95 or more credit hours receive only 2 hours credit. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

A1	MWF	8	220	CHILLAG
C1	MWF	10	221	F JOHNSON
G1	MWF	2	220	LOVE
M1	M	9	218	FRIEND
	TT	9	220	
Q1	M	12	218	STRONKS
	TT	12	220	

English 102. Introduction to Drama. Credit 3 hours. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. Students with 95 or more credit hours receive only 2 hours credit.

D1	MWF	11	220	WEISS
F1	MWF	1	220	DAVIS
J1	MWF	4	220	HARRIS
M1	M	9	222	LEONHARD
	TT	9	221	
R1	M	1	218	MACKIN
	TT	1	220	

English 103. Introduction to Fiction. Credit 3 hours. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's *Pride and Prejudice*, Balzac's *Pere Goriot*, Arnold Bennett's *Old Wives' Tale*, Dostoevski's *Crime and Punishment*, E. M. Forster's *A Passage to India* and the anthology *Reading Modern Short Stories*. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	221	I MILLER
E1	MWF	12	220	GRIEST
G1	MWF	2	221	CASSELL
H1	MWF	3	220	KERWICK
L1	M	8	218	LEONHARD
	TT	8	220	
P1	M	11	218	S MILLER
	TT	11	220	
Q1	M	12	222	NICHOLAS
	TT	12	221	

English 113. American Literature. Credit 3 hours. Classic American authors before the Civil War; an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

F1	MWF	1	221	LOVE
L1	M	8	222	WRIGHT
	TT	8	221	
N1	M	10	222	WRIGHT
	TT	10	221	

English 114. American Literature. Credit 3 hours. Classic American authors after the Civil War to the present; an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	221	WILLETT
P1	M	11	222	WRIGHT
	TT	11	221	
R1	M	1	222	STRONKS
	TT	1	221	
T1	M	3	222	STRONKS
	TT	3	221	

English 121. Chief English Writers Before 1800. Credit 3 hours. *Canterbury Tales, Utopia,* two plays by Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas.* This course, with English 122, is the normal prerequisite to an English major. This course, plus English 122 and 123, satisfies the humanities requirement in general education. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

B1	MWF	9	220	ATWOOD

English 122. Chief English Writers of the Nineteenth Century. Credit 3 hours. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam,* readings from T. H. Huxley, Browning's poems, and one novel. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

D1	MWF	11	221	COX

English 123. Chief Modern English Writers. Credit 3 hours. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

E1	MWF	12	221	WEISS

English 131. Introduction to Shakespeare. Credit 3 hours. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	MWF	10	220	VEST

FRENCH

French 101. Elementary Course. Credit 4 hours. Grammar, pronunciation, reading of modern authors, composition, and conversation. For students who have no credit in French. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101, without French 102.

A1	TWTF	8	232	SKOGEN
C1	TWTF	10	232	SKOGEN
D1	TWTF	11	232	LALLAS
H1	TWTF	3	236	LALLAS
J1	TWTF	4	230	LUTTON

French 102. Elementary Course. Credit 4 hours. Continuation of French 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

B1	TWTF	9	230	LEIN
C1	TWTF	10	230	LEIN
E1	TWTF	12	236	LALLAS
F1	TWTF	1	236	LALLAS
H1	TWTF	3	230	LUTTON
J1	TWTF	4	232	GRITZ

French 103. Modern French. Credit 4 hours. Rapid reading of modern authors, syntax, and composition; some conversational practice. Prerequisite: French 102 or two years of high school French.

B1	TWTF	9	232	SKOGEN
E1	TWTF	12	232	SKOGEN

French 104. Modern French. Credit 4 hours. Continuation of French 103. Prerequisite: French 103 or three years of high school French.

B1	TWTF	9	236	SCHUYLER
C1	TWTF	10	236	SCHUYLER
E1	TWTF	12	230	LEIN

French 113. Conversational Practice. Credit 1 hour. Oral practice for the development of elementary conversational skill and the improvement of pronunciation. Designed as a supplement to French 103 and 104, and open only to students concurrently enrolled in either French 103 or 104. Prerequisite: French 102 or two years of high school French.

F1	WF	1	233	LEIN

French 202. Introduction to French Literature. Credit 3 hours. Continuation of French 201. Prerequisite: French 104 or four years of high school French.

P10	TTF	11	236	SCHUYLER

G. E. 101. Engineering Graphical Communication. Credit 3 hours. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. Prerequisite: Plane geometry.

A1	MWF	8/10	135
A2	MWF	8/10	136
B1	MWF	10/12	135
B2	MWF	10/12	136
C1	MWF	12/2	135
C2	MWF	12/2	136
D1	MWF	2/4	135
F1	TT	8/11	135
F2	TT	8/11	136
F3	TT	8/11	137
G1	TT	11/2	135
G2	TT	11/2	136
G3	TT	11/2	137

G. E. 102. Engineering Geometry. Credit 3 hours. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. Prerequisite: General Engineering. 101.

A3	MWF	8/10	137
A4	MWF	8/10	141
A5	MWF	8/10	143
B3	MWF	10/12	137
B4	MWF	10/12	141
B5	MWF	10/12	143
B7	MWF	10/12	146
C3	MWF	12/2	137
C4	MWF	12/2	141
C5	MWF	12/2	143
D3	MWF	2/4	137

D4	MWF	2/4	141
D5	MWF	2/4	143
F4	TT	8/11	141
F5	TT	8/11	143
G4	TT	11/2	141
G5	TT	11/2	143

G. E. 107. Architectural Projections. Credit 2 hours. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. Prerequisite: Plane geometry.

A6	MWF	8/10	145
B6	MWF	10/12	145
D6	MWF	2/4	145
F6	TT	8/11	145
G6	TT	11/2	145

G. E. 108. Architectural Projections. Credit 2 hours. Shades and shadows; oblique, isometric, and perspective drawings; developments. Prerequisite: General Engineering 107.

A7	MWF	8/10	146
C7	MWF	12/2	146
D7	MWF	2/4	146
F7	TT	8/11	146
G7	TT	11/2	146

G. E. 210. Industrial Production Illustration. Credit 3 hours. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some with the airbrush; industrial production illustration. An approved elective in all engineering curricula. Prerequisite: General Engineering 102, or 107 and 108.

C6	MWF	12/2	145

G. E. 212. Graphical Calculation. Credit 1 hour. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

D12	M	2/4	136
D22	W	2/4	136

220. History of Engineering. Study of the important elements in the growth of the art and science of engineering from ancient times to the present; lives of some of the men who have been leaders; effect of engineering on the social conditions of the various periods. I, II; 3. Prerequisite: Junior standing.

A1	MWF	8	144

GEOGRAPHY

Geog. 104. World Regional Geography. Credit 3 hours. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. Students with 95 or more credit hours receive only 2 hours credit.

N1	MTT	10	14	COLBY
R10	TTF	1	14	COLBY

Geog. 105. Introductory Economic Geography. Credit 3 hours. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Students with 95 or more credit hours receive only 2 hours credit.

B1	M	9	13	FINNEY
	WF	9	14	

Geog. 107. Weather and Climate. Credit 4 hours. Planetary relations; the atmosphere, its composition, functions and behavior in the production of various weather types; air masses and air mass analysis; climatic types and climatic regions; application to present day activities. This course and Geography 108 meet the general education requirements in physical sciences in Liberal Arts and Sciences.

LEC	P1	TT	11	227	RHEUMER
LAB	1	W	8/10	13	RHEUMER
QUIZ	1	F	8	13	RHEUMER
LAB	2	W	12/2	13	RHEUMER
QUIZ	2	F	12	13	RHEUMER
LAB	3	TU	8/10	13	RHEUMER
QUIZ	3	TH	8	13	RHEUMER

Geog. 108. Landforms and Earth Resources. Credit 4 hours. The study of landforms from the geographic point of view; maps and their use; earth resources (native vegetation, soils, water resources, mineral resources); their development and utilization. This course and Geography 107 meet the general education requirements in physical sciences in Liberal Arts and Sciences.

LEC	N1	TT	10	227	CUTSHALL
LAB	11	M	1/3	13	FINNEY
QUIZ	11	F	2	13	FINNEY
LAB	12	TU	12/2	13	CUTSHALL
QUIZ	12	TH	1	13	CUTSHALL
LAB	13	W	10/12	13	FINNEY
QUIZ	13	F	11	13	FINNEY

Geog. 114. Conservation of Natural Resources. Credit 3 hours. Elements of the conservation of natural resources (soils, water, biotic, mineral, recreational) with special emphasis given to the general principles of conservation as they apply to the United States. Prerequisite: Sophomore standing.

N10	TTF	10	13	RHEUMER

Geog. 386. Political Geography. Credit 3 hours. World patterns of nations in relation to their natural environmental backgrounds: European nations; Africa, the exploited continent; national structures in Asia; western hemisphere nations. Prerequisite: one year of college geography, history, or political science.

F1	MW	1	14	CUTSHALL
	F	1	13	

GEOLOGY

Geol. 101. Physical Geology. Credit 4 hours. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences in Liberal Arts and Sciences. Students with 95 or more credit hours receive only 3 hours credit.

LEC	R	TT	1	213	KARPINSKI
LAB	1	TU	8/10	42	DEMAR
QUIZ	1	TH	8	42	DEMAR
LAB	2	TH	10/12	42	KARPINSKI
QUIZ	2	TU	11	42	KARPINSKI
LAB	3	W	12/2	42	KURS
QUIZ	3	F	12	42	KURS
LAB	4	F	2/4	42	KURS
QUIZ	4	W	2	42	KURS
LAB	5	M	11/1	42	KURS
QUIZ	5	F	11	42	KURS

Geol. 102. Historical Geology. Credit 4 hours. Evolution of the earth and its life. Lectures and laboratory. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or equivalent. This course, with Geology 102, meets the physical sciences requirement in Liberal Arts and Sciences.

LEC	P	TT	11	217	DEMAR
LAB	11	W	10/12	42	DEMAR
QUIZ	11	F	10	42	DEMAR
LAB	12	TU	3/5	42	DEMAR
QUIZ	12	TH	3	42	DEMAR

Geol. 110. Field Work. Credit 2 hours. Field observation in St. Francois Mountains and adjacent parts of Missouri and Illinois. (During spring vacation.) Two three-hour class meetings to be arranged. Credit is given only on completion of a satisfactory written report. Prerequisite: Geology 101, 150, or Physical Science 102.

LAB	18	Field trip Thurs.,Mar.30 thru Tues.,Apr.4 (6 days). Report due by Fri.,May 19.			STAFF

Geol. 132. Mineralogy. Credit 4 hours. A systematic study of minerals and rocks. The geologic relationships of minerals and rocks are emphasized. The common silicate minerals and the important varieties of rocks are studied in the laboratory. Lecture and laboratory. Prerequisite: Geology 131.

LAB	19	MWF	8/10	42	KURS

Geol. 150. Geology for Engineers. Credit 3 hours. Prerequisite: Sophomore standing in the College of Engineering.

LEC	D	MW	11	213	KARPINSKI
LAB	21	M	1/3	42	KARPINSKI
LAB	22	W	3/5	42	KARPINSKI

GERMAN

German 101. Elementary Course. Credit 4 hours. Oral practice, reading, and grammar for beginners. Not open to students who have high school credit in this language. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

A1	TWTF	8	212	HARTOCH
B1	TWTF	9	212	WHITE
C1	TWTF	10	212	WHITE
E1	TWTF	12	212	BRAUNFELD
F1	TWTF	1	212	KAUF
H1	TWTF	3	212	GRAY
J1	TWTF	4	212	GRAY

German 102. Elementary Course. Credit 4 hours. Continuation of German 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

A1	TWTF	8	218	HOUGH
B1	TWTF	9	218	TEICHMANN
C1	TWTF	10	218	HOUGH
D1	TWTF	11	218	VARDAMAN
E1	TWTF	12	218	KAUF
F1	TWTF	1	218	WILLNER

F2	TWTF	1	222	TEICHMANN
H1	TWTF	3	218	BRAUNFELD
H2	TWTF	3	216	WILLNER
J1	TWTF	4	218	KAUF

German 103. Intermediate Course. Credit 4 hours. Modern narrative prose. Oral practice and sight reading. Prerequisite: German 102, two years of high school German, or equivalent.

B1	TWTF	9	216	HOUGH
D1	TWTF	11	216	BRAUNFELD
E1	TWTF	12	216	HOUGH
F1	TWTF	1	216	BRAUNFELD

German 104. Intermediate Course. Credit 4 hours. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. Prerequisite: German 103, three years of high school German, or equivalent.

B1	TWTF	9	222	HARTOCH
C1	TWTF	10	222	TEICHMANN
D1	TWTF	11	222	TEICHMANN
E1	TWTF	12	222	WILLNER
H1	TWTF	3	222	KAUF

German 211. Conversation and Writing. Credit 3 hours. Prerequisite: German 104, or German 103 and 113 or equivalent.

P10	TTF	11	212	WILLNER

German 252. Modern German Drama. Credit 3 hours. A study of the drama of the nineteenth and twentieth centuries, its relation to the Greek drama and world drama. Prerequisite: German 210 or consent of instructor.

R10	TTF	1	230	VARDAMAN

HISTORY

Hist. 112. History of Western Civilization from 1815 to the Present. Credit 4 hours. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. Credit 4 hours. Students with 95 or more credit hours receive only 3 hours credit.

Lecture and quiz sections in this course are coordinate. Quiz section must be chosen from the group listed directly under the particular lecture section selected.

LEC	M1	TT	9	205	NICHOLSON
QUIZ	A1	WF	8	16	ASCH
QUIZ	E1	WF	12	17	NICHOLSON
QUIZ	F1	WF	1	20	GOODMAN

QUIZ	G1	WF	2	96	NICHOLSON
QUIZ	L1	TT	8	17	ASCH
QUIZ	Q1	TT	12	16	GOODMAN
QUIZ	R1	TT	1	17	NICHOLSON

LEC	F1	MW	1	205	UNFER
QUIZ	A2	MW	8	17	UNFER
QUIZ	D1	MW	11	14	UNFER
QUIZ	H1	MW	3	14	UNFER
QUIZ	M1	TT	9	17	ASCH
QUIZ	N1	TT	10	20	UNFER
QUIZ	P1	TT	11	16	UNFER

Hist. 132. History of England from 1714 to the Present. Credit 4 hours. A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1714 to the present. Students with 95 or more credit hours receive only 3 hours credit.

LEC	D1	W	11	227	JONES/GOODMAN
QUIZ	N1	MTT	9	37	JONES
QUIZ	P10	TTF	11	37	GOODMAN
QUIZ	Q1	MTT	12	96	JONES
QUIZ	T10	TTF	3	37	GOODMAN

Hist. 152. History of the United States from 1865 to the Present. Credit 4 hours. A century of national life and organization. This course with History 151 meets the social science requirement in Liberal Arts and Sciences.

LEC	D1	M	11	205	BILL/JONES
QUIZ	G1	MWF	2	37	BILL
QUIZ	L1	MTT	8	37	JONES
QUIZ	M1	MTT	9	28	BILL
QUIZ	N1	M	10	13	RIDDLE
		TT	10	19	
QUIZ	N10	TTF	10	37	BILL
QUIZ	Q10	TTF	12	37	BILL
QUIZ	R1	MTT	1	37	JONES

Hist. 182. The Ancient World. Credit 3 hours. Rome. Prerequisite: Sophomore standing.

N10	TTF	10	28	NICHOLSON

Hist. 370. Constitutional Development of the United States since 1865. Credit 3 hours. Prerequisite: One year of college history or political science.

P1	M	11	13	RIDDLE
	TT	11	14	

HUMANITIES

Humanities 102. Values in Literature. Credit 4 hours. A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. Prerequisite: Humanities 101.

A1	MTWT	8	206	RUNYAN
B1	MTWT	9	206	KOGAN
C1	MTWT	10	206	RUNYAN
E1	MTWT	12	206	KOGAN
H1	MTWT	3	206	GALLAGHER

Humanities 152. The Heritage of Western Culture. Credit 4 hours. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. This course, plus Humanities 151, satisfies the general education requirement in the humanities. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

C1	TWTF	10	216	VARDAMAN
D1	MTWT	11	206	SCHILLER
F1	MTWT	1	206	SCHILLER

HYGIENE

Hygiene 104. Personal and Community Hygiene. Credit 2 hours. This course covers basic principles of hygiene. Especially recommended for those going into teaching, occupational therapy, social work, etc. Students with 95 or more credit hours receive only 1 hour credit.

C	WF	10	237
N	TT	10	237
D	WF	11	237
P	TT	11	237
F	WF	1	237
R	TT	1	237
H	WF	3	237
T	TT	3	237
J	WF	4	237

Hygiene 110. Public Health. Credit 2 hours. Material presented deals with information about community public health problems and the program designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

P	TT	11	24	

MANAGEMENT

Management 101. Industrial Organization and Management. Credit 3 hours. Organization plans, administrative policies, and management problems with special attention to manufacturing units. Prequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

C1	MWF	10	24	GILLETT
F1	MWF	1	24	GILLETT
G1	MWF	2	24	GILLETT

MARKETING

Marketing 101. Principles of Marketing. Credit 3 hours. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

B1	MWF	9	17	ALHADEFF
E1	MWF	12	16	ALHADEFF
T1	MTT	3	33	LARSON

MATHEMATICS

Math. 101. Basic Mathematics. Credit 3 hours. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry.

D1	MWF	11	201	VEDRAL

Math. 103. Introduction to College Algebra. Credit 3 hours. Fundamental operations, simple equations, factoring, fractions, exponents, radicals, linear equations in more than one variable, graphing, quadratic equations in one unknown. Students having $1\frac{1}{2}$ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

A1	MTWTF	8	101	ONDRAK
A2	MWF	8	105	SJOBLOM
B1	MTWTF	9	111	GORDON
B2	MTWTF	9	104	CURTIS

C1	MTWTF	10	101	BERGLUND
C2	MTWTF	10	105	LARIVIERE
D1	MTWTF	11	101	BALLARD
D2	MWF	11	82	LUMLEY
E1	MTWTF	12	106	ALBERTI
E2	MWF	12	111	KUZMANIC
F1	MTWTF	1	111	LINN
G1	MWF	2	82	HENDERLEITER
H1	MTWTF	3	103	SCHOLOMITI
H2	MWF	3	111	PENNISI
J1	MTWTF	4	103	BARTHA
N1	MTT	10	106	SEARS
N10	TT	10	104	ZIOMEK
	F	10	106	

Math. 108. Elementary Plane Geometry for Veterans. No credit. This course deals with the usual topics of high school geometry. It is designed as a refresher course for those who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course.

G1	MWF	2	105	NOLAN

Math. 110. Fundamentals of Mathematics. Credit 4 hours. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Prerequisite: Mathematics 109.

F1	MTWT	1	102	ALBERTI

Math. 111. Algebra. Credit 5 hours. Students with 95 or more credit hours receive only 3 hours credit. Required for students in Architecture deficient in algebra. Other students admitted only by consent of their college office and the Mathematics Department. Prerequisite: Entrance algebra, 1 unit and plane geometry, 1 unit.

H1	MTWTF	3	102	WILEY

Math. 112. College Algebra. Credit 3 hours. Theory of quadratic equations, progressions, binomial theorem, permutations, combinations, determinants, introduction to the theory of equations, logarithms. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

* Sections open to Commerce students only.

*	A1	MWF	8	111	GORDON
	A2	MWF	8	103	LUMLEY
*	B1	MWF	9	106	VEDRAL
	B2	MWF	9	103	FRANK

• C1	MWF	10	104	MURPHY
C2	MWF	10	82	ZYGMUND
C3	MWF	10	111	ONDRAK
• D1	MWF	11	104	KUZMANIC
D2	MWF	11	100	DINKINES
E1	MWF	12	105	NOLAN
E2	MWF	12	100	OLSEN
F1	MWF	1	106	ZYGMUND
F2	MWF	1	103	BERGLUND
• G1	MWF	2	102	WILEY
G2	MWF	2	103	BARTHA
G3	MWF	2	111	HILL
H1	MWF	3	100	MERTES
J1	MWF	4	105	HENDERLEITER

Math. 114. Plane Trigonometry. Credit 2 hours. Identities, equations, addition formulas and derived relations, solution of right and oblique triangles, radian measure, inverse functions. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

L1	TT	8	100	ZIOMEK
L2	TT	8	111	LUMLEY
M1	TT	9	101	VEDRAL
M2	TT	9	103	BALLARD
N1	TT	10	103	CURTIS
N2	TT	10	82	SJOBLUM
P1	TT	11	111	BERGLUND
P2	TT	11	106	SEARS
Q1	TT	12	105	NOLAN
Q2	TT	12	100	SCHOLOMITI
Q3	TT	12	101	LINN
R1	TT	1	103	BARTHA
R2	TT	1	101	MERTES
R3	TT	1	106	ZYGMUND

T1	TT	3	106	LASHER
T2	TT	3	100	HILL
U1	TT	4	105	HENDERLEITER

Math. 123. Analytic Geometry. Credit 5 hours. Geometrical properties of curves and surfaces, coordinate systems, translation and rotation of axes, higher plane curves, parametric equations. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, and 114.

A1	MTWTF	8	82	VEDRAL
B1	MTWTF	9	201	LUMLEY
B2	MTWTF	9	102	SJOBLOM
B3	MTWTF	9	202	ZIOMEK
C1	MTWTF	10	202	GORDON
C2	MTWTF	10	201	LINN
D1	MTWTF	11	102	OLSEN
D2	MTWTF	11	105	LARIVIERE
E1	MTWTF	12	103	ZYGMUND
E2	MTWTF	12	104	SEARS
F1	MTWTF	1	100	SCHOLOMITI
F2	MTWTF	1	104	NOLAN
F3	MTWTF	1	201	HILL
H1	MTWTF	3	105	ALBERTI
H2	MTWTF	3	101	BARTHA
J1	MTWTF	4	101	LASHER

Math. 133. Calculus. Credit 3 hours. First course for students of mathematics and engineering. Theory of limits, differentiation and integration of standard algebraic and trigonometric forms, integration as a process of summation, applications. Prerequisite: Mathematics 123.

A1	MWF	8	100	ZIOMEK
B1	MWF	9	101	BALLARD
C1	MWF	10	103	FRANK
D1	MWF	11	111	BERGLUND
D2	MWF	11	106	SEARS
E1	MWF	12	102	MURPHY
F1	MWF	1	105	LARIVIERE

G1	MWF	2	100	DINKINES
H1	MWF	3	106	LASHER
J1	MWF	4	111	PENNISI

Math. 143. Calculus. Credit 5 hours. Second course for students of mathematics and engineering. Integration of rational fractions, integration by parts, series and expansion of functions, hyperbolic functions, partial differentiation, multiple integrals, applications. Prerequisite: Mathematics 133.

B1	MTWTF	9	105	ONDRAK
C1	MTWTF	10	102	OLSEN
E1	MTWTF	12	82	MERTES
F1	MTWTF	1	82	WILEY
H1	MTWTF	3	104	HENDERLEITER

Math. 161. Statistics. Credit 3 hours. An elementary course in the basic concepts of probability and statistics, arrangement and analysis of raw data, hypothesis testing, confidence limits and method of least squares. Prerequisite: Mathematics 112; sophomore standing.

G1	MWF	2	101	MERTES

Math. 263. Statistics in Engineering and Physical Sciences. Credit 3 hours. A first course in the use of statistical methods for interpreting the results of experiments. Applications to engineering and the physical sciences are emphasized. Prerequisite: One year of calculus.

G1	MWF	2	104	LASHER

Math. 315. Linear Transformations and Matrices. Credit 3 hours. A survey course in elementary matrix algebra, covering vector space, linear transformations, representation of transformations by matrices. Prerequisite: One year of calculus.

E1	MWF	12	101	DINKINES

Math. 342. Differential Equations. Credit 3 hours. An introductory course to partial differential equations, boundary value problems and Fourier series. Also considered are orthogonal functions, Fourier integrals, Bessel functions, applications to physical problems. Prerequisite: Mathematics 341.

D1	MWF	11	103	FRANK

Math. 343. Advanced Calculus. Credit 3 hours. The course includes the vector calculus, differential and integral calculus of functions of several variables, infinite series, power series, and line and surface integrals. Prerequisite: One year of calculus.

B1	MWF	9	100	MORGENTHALER
G1	MWF	2	106	PENNISI

Math. 345. Differential Equations and Orthogonal Functions. Credit 3 hours. Theory of solving the standard elementary differential equations and application of these. Power series, solutions of second order equations and operational methods are included. A brief introduction is given to partial differential equations and Fourier series methods. Prerequisite: One year of calculus.

C1	MWF	10	100	SJOBLOM
D1	MWF	11	202	CURTIS
F1	MWF	1	101	MURPHY
H1	MWF	3	82	HILL

M. E. 182. Manufacturing Processes. Credit 3 hours. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. Prerequisite: General Engineering 101, sophomore standing.

	B1	MWF	9	65

M. E. 183. Materials Casting. Credit 3 hours. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. Prerequisite: General Engineering 101; sophomore standing.

LEC	D	MF	11	65
LAB	A	TU	8/11	71
LAB	B	W	11/2	71

M. E. 184. Metal Processing. Credit 3 hours. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. Prerequisite: General Engineering 101; credit or registration in Integral Calculus and Physics 108.

LEC	N	TT	10	65
LAB	B	W	11/2	64
LAB	C	F	2/5	64

M. E. 209. Thermodynamics and Heat Transfer. Credit 3 hours. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles and processes involving transfers of mass and energy. Basic laws of heat transfer. Prerequisite: Physics 107, Mathematics 142 or 143.

	E1	MWF	12	110

M. E. 221. Mechanics of Machinery. Credit 5 hours. Linkages, cams, and gears; belts, ropes, and chains; velocities, accelerations, and inertia forces in machines; vibrations and critical speeds; balancing of engines; principle of the gyroscope. Prerequisite: T.A.M. 156 or registration in Theoretical and Applied Mechanics 211.

LEC	D1	MWF	11	63
LAB	D	TT	11/2	63

MILITARY SCIENCE AND TACTICS

Mil. Sci. 102. Freshman Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: American military history, and leadership, drill, and command. Prerequisite: Military Science 101 or equivalent.

LEC	1	MW	9	238	TERRELL
LEC	2	TT	9	238	TERRELL
LEC	3	MW	10	238	TERRELL
LEC	4	TT	10	238	TERRELL
LEC	5	MW	11	238	TERRELL
LEC	6	TT	11	238	TERRELL
LAB	1	TU	8	AUD	CRUMPACKER
LAB	2	W	8	AUD	CRUMPACKER

Mil. Sci. 104. Sophomore Basic Drill and Theory. Credit 1 hour. Basic military instruction to include: Crew-served weapons and gunnery; elementary communications and leadership, drill, and command. Prerequisite: Military Science 103 or equivalent.

LEC	1	MW	1	238	MANSFIELD
LEC	2	TT	1	238	MANSFIELD
LEC	3	MW	2	238	MANSFIELD
LEC	4	TT	3	238	MANSFIELD
LAB	1	TU	8	AUD	MANSFIELD
LAB	2	W	8	AUD	MANSFIELD

MUSIC

Music 100. Rudiments of Theory. Credit 2 hours. Notation, scales, intervals, chords, terminology.

P10	TTF	11	354	FISSINGER

Music 131. Introduction to the Art of Music, II. Credit 3 hours. Designed primarily for the layman. Main objectives are to train students in intelligent listening and to acquaint them with many great works of the literature of music. For nonmusic students only.

N10	TTF	10	354	FISSINGER

Music 150. Music Ensemble. Credit ½ hour. Band, Orchestra, Chorus. Admission by consent of director. This course may be repeated to earn a maximum of 2 semester hours of credit.

A	TT	2	354	CHARKOVSKY
B	TT	12	354	CHARKOVSKY
* C	F	3/5	354	FISSINGER

* Sectional rehearsals to be arranged.

PHILOSOPHY

Phil. 101. Introduction to Philosophy. Credit 3 hours. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. Phil. 101, 102, 105 form an approved humanities sequence in Liberal Arts and Sciences. Credit 3 hours. Prerequisite: Sophomore standing.

A1	MWF	8	28	PAGE
D1	MWF	11	28	PAGE
G1	MWF	2	94	D MORRIS

Phil. 102. Logic. Credit 3 hours. Reasoning, detection of fallacies, evidence. Prerequisite: Sophomore standing.

B1	MWF	9	94	PAGE
C1	MWF	10	94	D MORRIS
E1	MWF	12	94	D MORRIS
H1	MWF	3	13	D MORRIS

Phil. 105. Moral Ideas and Practice. Credit 2 Hours. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

M1	TT	9	24	PAGE
N1	TT	10	21	PAGE

PHYSICAL EDUCATION FOR MEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

* Special conditioning sections.
** Adaptive only.

P. E. M. 101, 102, 103, 104. Prescribed Exercises. Credit 1 hour. Open only to students who are assigned by the Health Service. Students enrolling for the first time should register for P. E. M. 101. Students enrolling for the second, third, or fourth time should register for P. E. M. 102, 103, 104, respectively.

C	MWF	10	GYM	MAKSUD
D	MWF	11	GYM	DESCOUROUEZ
E	MWF	12	GYM	MAKSUD
F	MWF	1	GYM	NEMOTO

P. E. M. 106. Developmental Activities. Credit 1 hour. Activities that contribute to the development and maintenance of physical fitness according to social and hygenic standards.

*	A	MWF	8	GYM	NOLAN
	B	MWF	9	GYM	RADER
	C	MWF	10	GYM	KRISTUFEK
	D	MWF	11	GYM	BERRAFATO
	E	MWF	12	GYM	MILLER
	F	MWF	1	GYM	FORDHAM
	G	MWF	2	GYM	RUSSO
*	H	MWF	3	GYM	GEDVILAS

P. E. M. 107. Beginning Swimming. Credit 1 hour. For nonswimmers (inability to swim 100 yards). Students must have 8:00 and 9:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

LM	TT	8	Y	DESCOUROUEZ

P. E. M. 109. Advanced Swimming. Credit 1 hour. For swimmers (ability to swim at least 100 yards). Student must have 8:00, 9:00 and 10:00 hours free on TT. First class will meet in the Gym. A service fee of $7.50 per student will be collected during the first class period.

MN	TT	9	Y	SPRINGER

P. E. M. 112. Individual Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

B	MWF	9	GYM	DESCOUROUEZ
C	MWF	10	GYM	MONTCALM
D	MWF	11	GYM	MILLER
E	MWF	12	GYM	FORDHAM
G	MWF	2	GYM	SPRINGER
MN	TT	9	GYM	BECK
PQ	TT	11	GYM	RUSSO
QR	TT	12	GYM	MONTCALM
RS	TT	1	GYM	NOLAN

P. E. M. 113. Double Tumbling Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

F	MWF	1	GYM	SPRINGER

P. E. M. 114. Apparatus Stunts. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

B	MWF	9	GYM	MONTCALM
C	MWF	10	GYM	NOLAN
D	MWF	11	GYM	BECK

E	MWF	12	GYM	MONTCALM
F	MWF	1	GYM	MONTCALM
G	MWF	2	GYM	MONTCALM
NP	TT	10	GYM	MONTCALM
QR	TT	12	GYM	NOLAN

P. E. M. 117. Boxing. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	BECK
D	MWF	11	GYM	NEMOTO
E	MWF	12	GYM	MENOTO
F	MWF	1	GYM	NOLAN
PQ	TT	11	GYM	NEMOTO
QR	TT	12	GYM	KRISTUFEK

P. E. M. 118. Wrestling. Credit 1 hour. Skill, knowledge, attitudes, and conditions.

B	MWF	9	GYM	KRISTUFEK
C	MWF	10	GYM	DESCOUROUEZ
D	MWF	11	GYM	STRNAD
E	MWF	12	GYM	STRNAD
F	MWF	1	GYM	DESCOUROUEZ
G	MWF	2	GYM	STRNAD
NP	TT	10	GYM	STRNAD
PQ	TT	11	GYM	KRISTUFEK
QR	TT	12	GYM	BECK
RS	TT	1	GYM	DESCOUROUEZ

P. E. M. 120. Personal Defense Activities. Credit 1 hour. Skills, knowledge, attitudes and conditions.

A	MWF	8	GYM	RADER
H	MWF	3	GYM	BECK
MN	TT	9	GYM	KRISTUFEK

P. E. M. 122. Individual Athletics. Credit 1 hour. Skills, knowledge, attitudes and conditions.

E	MWF	12	GYM	SPRINGER

P. E. M. 123. Weight Lifting. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

A	MWF	8	GYM	BECK
B	MWF	9	GYM	MILLER
C	MWF	10	GYM	SPRINGER
D	MWF	11	GYM	RUSSO
E	MWF	12	GYM	RADER
F	MWF	1	GYM	GEDVILAS
G	MWF	2	GYM	VERSEN
H	MWF	3	GYM	STRNAD
LM	TT	8	GYM	RADER
MN	TT	9	GYM	NOLAN
NP	TT	10	GYM	NEMOTO
PQ	TT	11	GYM	BERRAFATO
QR	TT	12	GYM	MAKSUD
RS	TT	1	GYM	SPRINGER

P. E. M. 129. Volleyball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

**G	MWF	2	GYM	FORDHAM
H	MWF	3	GYM	NOLAN
MN	TT	9	GYM	MILLER
NP	TT	10	GYM	BERRAFATO
PQ	TT	11	GYM	VERSEN
QR	TT	12	GYM	STRNAD
RS	TT	1	GYM	RUSSO

P. E. M. 130. Basketball. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

C	MWF	10	GYM	RUSSO
D	MWF	11	GYM	MAKSUD
F	MWF	1	GYM	RADER
G	MWF	2	GYM	GEDVILAS

P. E. M. 132. Archery. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

NP	TT	10	GYM	RADER

P. E. M. 136. Badminton. Credit 1 hour. Skills, knowledge, attitudes, and conditions.

NP	TT	10	GYM	MAKSUD
PQ	TT	11	GYM	MILLER
QR	TT	12	GYM	DESCOUROUEZ
RS	TT	1	GYM	BECK

P. E. M. 139. Backyard Sports. Credit 1 hour. Skills, knowledge, and conditions.

** H	MWF	3	GYM	VERSEN
RS	TT	1	GYM	STRNAD

P. E. M. 140. Boating and Fishing. Credit 1 hour. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education. Students must furnish their own personal equipment, but should purchase no equipment until after the first meeting of the class. Boats, canoes, life jackets will be furnished.

PQ	TT	11	GYM	RADER
QR	TT	12	GYM	SPRINGER

P. E. M. 142. Ballroom Dance. Credit 1 hour.

G	MWF	2	AUD	ROZEN

P. E. M. 150. Professional Orientation. Credit 2 hours. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors.

C	MW	10	28	FORDHAM
D	WF	11	17	VERSEN

P. E. M. 151. Beginning Basketball. Credit 2 hours. Introductory skills, rules and strategy. For physical education majors. First 8 weeks.

A1	MTWTF	8/10	GYM	MAKSUD
A2	MTWTF	8/10	GYM	RUSSO

P. E. M. 152. Beginning Football. Credit 2 hours. Introductory skills, rules and strategy. For physical education majors. Second 8 weeks.

A1	MTWTF	8/10	GYM	VERSEN
A2	MTWTF	8/10	GYM	NEMOTO

P. E. M. 209. History of Sports. Credit 3 hours. Development of sports and physical education in Europe and United States since 1750. For physical education majors only.

F	M	1	75	KRISTUFEK
	WF	1	23	

RECREATION

Recreation 170. Outdoor Recreational Sports. Credit 2 hours. Soccer, touch football, volleyball, softball, speedball. Second 8 weeks.

A	MTWTF	8/10	GYM	BERRAFATO

Recreation 171. Indoor Recreational Sports. Credit 2 hours. Badminton, handball, paddle tennis, squash, racquets, table tennis, weight lifting.

First 8 weeks.

A	MTWTF	8/10	GYM	BERRAFATO

Recreation 174. Camp Counseling. Credit 3 hours. Objectives, administration, techniques, activity programs, evaluation.

E	MW	12	37	GEDVILAS
	F	12	80	

PHYSICAL EDUCATION FOR WOMEN

All TT classes meet for 1½ hours; students will be released early to participate in extra-curricular activities.

P. E. W. 100. Conditioning Activities. Credit 1 hour. Foundation course offering activities for the maintenance and improvement of physical fitness.

MN	TT	9	AUD	LYNN
NP	TT	10	AUD	LYNN
QR	TT	12	AUD	LYNN
TU	TT	3	AUD	LYNN
H1	MWF	3	AUD	ROZEN
H2	MWF	3	AUD	LYNN

P. E. W. 102. Modified Activities. Credit 1 hour. Prescribed recreational sports. relaxation, and exercise. Prerequisite: Recommendation from the Department of Health Service.

E	MWF	12	AUD	LYNN

P. E. W. 105. Elementary Rhythms. Credit 1 hour. Beginning techniques in the field of dance..

A	MTHF	8	AUD	CLAYPOOLE
B	MWF	9	AUD	CLAYPOOLE
C	MWF	10	AUD	CLAYPOOLE
F	MWF	1	AUD	ROZEN
NP	TT	10	AUD	CLAYPOOLE
QR	TT	12	AUD	PAPPAS
RS	TT	1	AUD	PAPPAS
TU	TT	3	AUD	PAPPAS
UV	TT	4	AUD	PAPPAS

P. E. W. 106. Intermediate Rhythms. Credit 1 hour. Intermediate dance techniques, solo and group dance compositions. Prerequisite: Physical Education for Women 105 or consent of instructor.

MN	TT	9	AUD	CLAYPOOLE

P. E. W. 123. Basketball. Credit 1 hour.

F	MWF	1	AUD	LYNN
PQ	TT	11	AUD	ANZALONE

P. E. W. 124. Volleyball. Credit 1 hour.

D	MWF	11	AUD	PESAVENTO
RS	TT	1	AUD	ANZALONE

P. E. W. 130. Badminton. Credit 1 hour. Personal equipment to be furnished by student.

G	MWF	2	AUD	ANZALONE

P. E. W. 131. Golf. Credit 1 hour. Personal equipment to be furnished by student.

A	MTHF	8	AUD	PESAVENTO

P. E. W. 135. Archery. Credit 1 hour. Personal equipment to be furnished by student.

J	MWF	4	AUD	ROZEN

P. E. W. 141. Tumbling and Apparatus Stunts. Credit 1 hour. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used.

QR	TT	12	AUD	ANZALONE

P. E. W. 142. Ballroom Dance. Credit 1 hour.

G	MWF	2	AUD	ROZEN

P. E. W. 144. Elementary Folk Dance. Credit 1 hour.

E	MWF	12	AUD	BARTON

P. E. W. 152. Volleyball and Softball. Credit 1 hour. Skills, rules, team tactics. For physical education majors.

C	MTWTF	10	AUD	PESAVENTO

P. E. W. 154. Tumbling and Tennis. Credit 1 hour. Skills, stunts, trampoline; tennis skills, rules, tactics.

B	MTWTF	9	AUD	PESAVENTO

P. E. W. 166. Elementary School Games. Credit 2 hours. Games for classroom, playground, and gymnasium; programs, lesson planning, source materials. For physical education majors.

E	MWF	12	AUD	ANZALONE
	F	1	AUD	

DANCE

Dance 160. Beginning Contemporary Dance. Credit 2 hours. For physical education majors.

D	MTWTF	11	AUD	CLAYPOOLE

PHYSICAL SCIENCE

Phys. Sci. 101. Introduction to the Physical Sciences. Credit 4 hours. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Two units of high school mathematics or consent of the department.

LEC	B	WF	9	213	MELOY
LAB	1	W	2/5	85	JOHNSON
QUIZ	1	F	2	75	JOHNSON
LAB	2	TH	8/11	85	JOHNSON
QUIZ	2	TU	8	76	JOHNSON
LAB	3	TH	11/2	85	FARAG
QUIZ	3	M	12	75	FARAG
LAB	4	F	10/1	85	FARAG
QUIZ	4	TU	9	75	FARAG
LAB	5	TH	3/6	85	POTEMPA
QUIZ	5	W	4	75	POTEMPA
LAB	6	F	2/5	85	COWIN
QUIZ	6	M	3	74	COWIN

Phys. Sci. 102. Introduction to the Physical Sciences. Credit 4 hours. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has college credit in physics or geology. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Physical Science 101, or Division of General Studies 141.

LEC	M	TT	9	227	MELOY
LAB	11	M	9/12	85	COWIN
QUIZ	11	F	9	75	COWIN
LAB	12	M	1/4	85	JOHNSON
QUIZ	12	F	1	74	JOHNSON
LAB	13	TU	11/2	85	FARAG
QUIZ	13	F	9	76	FARAG
LAB	14	W	9/12	85	COWIN
QUIZ	14	F	11	75	COWIN

Physics 101. General Physics (Mechanics, Heat, Sound). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite. Trigonometry.

LEC	X	TU	11	127	STAFF
LEC	Y	TU	1	127	STAFF
QUIZ	B1	MWF	9	144	WILBUR
LAB	B	TH	8/11	117	WILBUR
QUIZ	E1	MWF	12	113	LIVERMORE
LAB	E	TH	3/6	117	LIVERMORE
QUIZ	F1	MWF	1	144	WILBUR
LAB	F	TU	3/6	117	WILBUR
QUIZ	G1	MWF	2	134	LIVERMORE
LAB	G	TH	11/2	117	LIVERMORE

Physics 102. General Physics (Electricity, Magnetism, Light, and Modern Physics). Credit 5 hours. Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. Prerequisite: Physics 101.

LEC	X	TH	11	127	STAFF
QUIZ	B1	MWF	9	113	LERNER
LAB	B	TU	8/11	122	LERNER
QUIZ	E1	MWF	12	134	SILKETT
LAB	E	TU	11/2	122	SILKETT
QUIZ	C1	MWF	10	113	SILKETT
LAB	C	TH	8/11	122	SILKETT

Physics 106. General Physics (Mechanics). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, Mathematics, physics, and chemistry. Prerequisite: Credit or registration in mathematics 133.

LEC	X	M	10	127	STAFF
LEC	Y	M	1	127	STAFF
QUIZ	B1	WF	9	134	MORAINE
LAB	B	TU	8/11	123	MORAINE
QUIZ	C1	WF	10	134	WEISSMAN
LAB	C	TU	11/2	123	WEISSMAN

QUIZ	D1	W	11	113	CHANDLER
		F	11	134	
LAB	D	M	2/5	123	BESS
QUIZ	L1	TT	8	113	HASLETT
LAB	L	W	12/3	123	HASLETT
QUIZ	F1	WF	1	113	SKADELAND
LAB	F	TH	11/2	123	SKADELAND
QUIZ	N1	TU	10	113	SKADELAND
LAB	N	W	8/11	123	SKADELAND
QUIZ	M1	TT	9	113	MINKLER
LAB	M	F	8/11	123	MINKLER
QUIZ	P1	TT	11	134	PAPPADEMOS
LAB	P	W	3/6	123	PAPPADEMOS
QUIZ	Q1	TT	12	113	MORAINE
LAB	Q	F	12/3	123	MORAINE

Physics 107. General Physics (Heat, Electricity, Magnetism). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Physics 106; credit or registration in Mathematics 143.

LEC	X	W	10	127	STAFF
LEC	Y	W	1	127	STAFF
QUIZ	N1	TT	10	134	HASLETT
LAB	N	F	8/11	122	HASLETT
QUIZ	D1	MF	11	113	LERNER
LAB	D	TH	11/2	122	LERNER
QUIZ	M1	TU	9	134	JOHNSON
LAB	M	M	9/12	122	JOHNSON
QUIZ	Q1	TT	12	134	PAPPADEMOS
LAB	Q	M	2/5	122	PAPPADEMOS
QUIZ	R1	TT	1	113	ANDERSON
LAB	R	F	12/3	122	ANDERSON
QUIZ	T1	TT	3	113	PAPPADEMOS
LAB	T	F	3/6	122	PAPPADEMOS

Physics 108. General Physics (Sound, Light, Modern Physics). Credit 4 hours. Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. Prerequisite: Credit or registration in Physics 107 and Mathematics 143.

LEC	X	F	10	127	STAFF
LEC	Y	F	1	127	STAFF
QUIZ	L1	TT	8	134	MINKLER
LAB	L	W	8/11	124	MINKLER
QUIZ	M1	TH	9	134	JOHNSON
LAB	M	M	9/12	124	JOHNSON
QUIZ	D1	MW	11	134	MINKLER
LAB	D	TH	11/2	124	MINKLER
QUIZ	R1	TT	1	134	MCNEIL
LAB	R	W	12/3	124	MCNEIL
QUIZ	T1	TT	3	134	ANDERSON
LAB	T	M	3/6	124	ANDERSON

Physics 322. Theoretical Mechanics. Credit 4 hours. Continuation of Physics 321. Motion of a particle under a variable force, central field motion, accelerated reference systems, motion of a particle subject to constraints, rotation of a rigid body in three dimensions, vibrating systems and normal coordinates, generalized coordinates. Prerequisite: Physics 321.

LEC	D1	MWF	11	210	BESS

Physics 341. Electricity and Magnetism. Credit 4 hours. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. Prerequisite: General Physics and Calculus; Registration in Math. 341, 343 or 345.

LEC	G1	MWF	2	210	WEISSMAN
LAB	G	TH	3/6	210	WEISSMAN

Physics 342. Electricity and Magnetism. Credit 4 hours. Continuation of Physics 341. Boundary conditions and special methods in boundary value problems; interpretation of dielectric and magnetic properties of matter from the point of view of atomic and crystalline properties; use of complex notation in circuit problems; coupled circuits; nonlinear circuits; transmission lines; radiation from antennas; transmission and reflection of electromagnetic waves. Prerequisite: Physics 341.

LEC	B1	MWF	9	210	MCNEIL
LAB	B	TU	8/11	210	MCNEIL

383. Atomic Physics and Quantum Theory for Engineers. Introduces the student to the basic concepts of quantum theory which underlie modern theories of the properties of materials. Topics covered include elements of atomic and nuclear theory, kinetic and statistical theory, experimental basis of quantum theory, Schrödinger's equation and simple applications, atomic spectra and atomic structure, quantum states of molecules, band theory of solids, and quantum statistics. Lectures and problems. I, II; 3 hours, or ¾ to 1 unit. Prerequisite: General physics; general chemistry; Mathematics 345 or equivalent.

LEC	F1	MWF	1	134	CHANDLER

POLITICAL SCIENCE

Pol. Sci. 150. American Government: Organization and Powers. Credit 3 hours. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments in state and nation. Prerequisite: Sophomore standing.

A1	MWF	8	24	RAKOVE
F1	MWF	1	96	RAKOVE
P10	TT	11	22	BARBER
	F	11	94	
R10	TT	1	21	BARBER
	F	1	22	
T10	TT	3	22	BARBER
	F	3	20	

Pol. Sci. 151. American Government: Functions. Credit 3 hours. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power, regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

C1	MWF	10	96	RAKOVE
D1	MWF	11	96	RAKOVE

Pol. Sci. 381. American Foreign Relations. Credit 3 hours. Participation in international affairs; presidential initiative; development and organization of the Department of State; diplomatic intercourse; consular service; treaty-making power; development of foreign policy and its application to areas of major interest. Prerequisite: Six hours of political science.

N10	TT	10	94	BARBER
	F	10	14	

PSYCHOLOGY

Psych. 100. Introduction to Psychology. Credit 4 hours. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. Prerequisite: Second semester freshman standing.

Lecture and quiz sections in this course are coordinate. Quiz section must be chosen from the group listed under the particular lecture.

LEC	B1	WF	9	205	HOWARD
QUIZ	D1	WF	11	19	HOWARD
QUIZ	L1	TT	8	19	TYROLER
QUIZ	M1	TT	9	22	TYROLER
QUIZ	P1	TT	11	23	TYROLER
QUIZ	Q1	TT	12	20	HOWARD
QUIZ	R1	TT	1	16	HOWARD

LEC	Q1	TT	12	205	E LIPMAN
QUIZ	E1	WF	12	23	V LIPMAN
QUIZ	H1	WF	3	17	V LIPMAN
QUIZ	N1	TT	10	24	V LIPMAN
QUIZ	Q2	TT	12	38	V LIPMAN
QUIZ	R2	TT	1	38	V LIPMAN
QUIZ	T1	TT	3	38	V LIPMAN

Psych. 135. Statistical Methods in Psychology. Credit 3 hours. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. Prerequisite: Psychology 100.

B1	MWF	9	96	ZACHARIA

Psych. 145. Industrial Psychology. Credit 3 hours. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. Credit is not given for both Psych. 145 and Psych. 245 at Urbana. Prerequisite: Psychology 100.

M1	TT	9	23	HOWARD
	TH	10	23	

Psych. 150. Personality and Human Relations. Credit 3 hours. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. Prerequisite: Psychology 100 or equivalent.

LEC	C1	WF	10	227	E LIPMAN
QUIZ	B1	W	9	20	TYROLER
QUIZ	C1	W	10	14	TYROLER
QUIZ	E1	F	12	28	E LIPMAN

RHETORIC

Rhetoric 101. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit.

A1	MWF	8	235	COX
A2	MWF	8	234	WILLETT
B1	MWF	9	235	CHILLAG
B2	MWF	9	234	COX
B3	MWF	9	231	TERRILL
B4	MWF	9	229	I MILLER

C1	MWF	10	234	ATWOOD
C2	MWF	10	235	TERRILL
C3	MWF	10	231	I MILLER
C4	MWF	10	229	WILLETT
D1	MWF	11	235	F JOHNSON
D2	MWF	11	234	HEGIE
D3	MWF	11	231	KERWICK
E1	MWF	12	235	TERRILL
E2	MWF	12	234	HEGIE
E3	MWF	12	231	I MILLER
E4	MWF	12	229	STAR
F1	MWF	1	235	WILLETT
F2	MWF	1	234	TERRILL
F3	MWF	1	231	KERWICK
G1	MWF	2	235	KERWICK
G2	MWF	2	234	HEGIE
G3	MWF	2	231	GRIEST
G4	MWF	2	229	HARRIS
H1	MWF	3	235	HEGIE
H2	MWF	3	234	GRIEST
H3	MWF	3	231	LAWSON
H4	MWF	3	229	HARRIS
J1	MWF	4	235	GRIEST
J2	MWF	4	234	LAWSON
L1	MTT	8	204	MACKIN
M1	M	9	212	MACKIN
	TT	9	208	
M2	M	9	216	CARLSON
	TT	9	214	

M10	TT	9	235	SIDNEY
	F	9	206	
N1	M	10	212	NICHOLAS
	TT	10	208	
P1	M	11	212	MACKIN
	TT	11	208	
P2	M	11	216	TIMMIS
	TT	11	214	
Q1	MTT	12	202	GALLAGHER
Q10	TTF	12	237	PECK
R1	MTT	1	202	GALLAGHER
R2	M	1	216	TIMMIS
	TT	1	214	
R10	TT	1	204	SIDNEY
	F	1	206	
T1	M	3	212	NICHOLAS
	TT	3	208	
T2	M	3	216	TIMMIS
	TT	3	214	
U1	MTT	4	216	GALLAGHER

Rhetoric 102. Freshman Rhetoric and Composition. Credit 3 hours. This course provides elementary training and practice in the comprehension and expression of written English. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

A1	MWF	8	223	DAVIS
A2	MWF	8	214	HUNT
B1	MWF	9	223	VEST
B2	MWF	9	214	DAVIS
B3	MWF	9	208	HUNT
C1	MWF	10	223	LOVE
C2	MWF	10	214	CHILLAG

D1	MWF	11	223	LOVE
D2	MWF	11	214	DAVIS
D3	MWF	11	229	HUNT
D4	MWF	11	204	LAWSON
E1	MWF	12	223	CASSELL
E2	MWF	12	214	CHILLAG
E3	MWF	12	208	
E4	MWF	12	204	HUNT
F1	MWF	1	223	ATWOOD
F2	MWF	1	204	COX
F3	MWF	1	229	
G1	MWF	2	223	WEISS
G2	MWF	2	204	ATWOOD
G3	MWF	2	206	STAR
G4	MWF	2	212	LAWSON
G5	MWF	2	216	
G6	MWF	2	218	
H1	MWF	3	223	WEISS
H2	MWF	3	204	CASSELL
H3	MWF	3	208	
H4	MWF	3	232	
H5	MWF	3	221	STAR
J1	MWF	4	223	CASSELL
J2	MWF	4	204	STAR
J3	MWF	4	208	
L1	MTT	8	216	FRIEND
L2	MTT	8	226	SMITH
L3	MTT	8	229	
L10	TTF	8	208	PECK

M1	M	9	228	RUNYAN
	TT	9	223	
M2	M	9	232	SMITH
	TT	9	231	
M3	M	9	233	TIMMIS
	TT	9	234	
M4	M	9	230	
	TT	9	229	
M10	TTF	9	237	PECK
N1	M	10	228	SCHILLER
	TT	10	223	
N2	M	10	232	KOGAN
	TT	10	231	
N3	M	10	233	LEONHARD
	TT	10	234	
N4	M	10	236	S MILLER
	TT	10	235	
N5	M	10	230	CARLSON
	TT	10	229	
N10	TT	10	214	PECK
	F	10	206	
P1	M	11	228	FRIEND
	TT	11	223	
P2	M	11	232	RUDIN
	TT	11	231	
P3	M	11	230	CARLSON
	TT	11	229	
P10	TT	11	234	SIDNEY
	F	11	206	

Q1	M	12	228	WRIGHT
	TT	12	223	
Q2	M	12	232	RUNYAN
	TT	12	231	
Q3	M	12	233	LEONHARD
	TT	12	234	
Q4	M	12	230	FRIEND
	TT	12	229	
R1	M	1	228	KOGAN
	TT	1	223	
R2	M	1	232	S MILLER
	TT	1	231	
R3	M	1	230	CARLSON
	TT	1	229	
R4	M	1	236	NICHOLAS
	TT	1	235	
T1	M	3	228	SCHILLER
	TT	3	223	
T2	M	3	233	S MILLER
	TT	3	234	
T10	TTF	3	202	SIDNEY
U1	MTT	4	206	STRONKS

Rhetoric 133. Principles of Composition. Credit 3 hours. Practice in composition with emphasis on organization, paragraphing and sentence structure. For the student whose career requires competence in writing clear, precise prose as an adjunct to other professional activity. Credit is not given for Rhetoric 133 in addition to Rhetoric 143. Prerequisite: Rhetoric 102 or equivalent.

F1	MWF	1	214	RUDIN

Rhetoric 143. Intermediate Expository Writing. Credit 3 hours. Practice in expository types, with emphasis on style and critical analysis. Recommended for rhetoric majors. Credit is not given for Rhetoric 143 in addition to Rhetoric 133. Prerequisite: a grade of "A" or "B" in Rhetoric 102 or consent of instructor.

H1	MWF	3	214	RUDIN

Rhetoric 144. Narrative Writing. Credit 3 hours. Practice in description, narrative sketches, stories. Prerequisite: Rhetoric 101 and 102; sophomore standing.

G1	MWF	2	214	RUDIN

Rhetoric 151. Business Letter Writing. Credit 3 hours. Study of the correspondent's problems in business and practice in writing letters, with emphasis on organization, persuasion, and presentation from the reader's point of view. For the student whose career will require competence in writing letters. Prerequisite: Rhetoric 101 and 102.

C1	MWF	10	208	OLEKSY
D1	MWF	11	208	OLEKSY
F1	MWF	1	208	OLEKSY
G1	MWF	2	208	OLEKSY

RHETORIC FOR FOREIGN STUDENTS

(See also Speech for Foreign Students)

Rhetoric 103. English as a Foreign Language. No credit. An intensive review course in basic English structure for foreign students who are inadequately prepared for Rhetoric 101. Prerequisite: Reading knowledge of English and ability to understand instructions.

C1	TWTF	10	204	KIRSTEIN

Rhetoric 104. English as a Foreign Language. No credit. A continuation of Rhetoric 103. A rapid and intensive review of basic English structure and a study of more complicated sentence patterns with practice in oral and written composition, designed for students who may be inadequately prepared for Rhetoric 101. Prerequisite: Rhetoric 103 or consent of instructor.

M10	TTF	9	204	KIRSTEIN

Rhetoric 105. English as a Foreign Language. No credit. Intensive writing practice, designed to remedy the foreign student's problems in the area of his special difficulties. May be taken concurrently with Rhetoric 101. Prerequisite: Rhetoric 104 or consent of instructor.

P1	TT	11	204	KIRSTEIN

SOCIAL SCIENCES

Soc. Sci. 111. The Individual in Society. Credit 4 hours. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

LEC	G1	MW	2	213	PINTO
QUIZ	H1	MW	3	94	PINTO
QUIZ	M1	TT	9	38	BLUM
QUIZ	N1	TT	10	38	BLUM
QUIZ	P1	TT	11	38	WARREN

Soc. Sci. 113. World Patterns and World Problems. Credit 4 hours. A general education course designed to bring the student to an understanding of the geographic, economic, an political bases of the present world situation. Students with 95 or more credit hours receive only 3 hours credit.

LEC	E1	M	12	227	COLBY
QUIZ	A1	MWF	8	14	FINNEY
QUIZ	G1	MWF	2	14	CUTSHALL
QUIZ	M1	MTT	9	14	COLBY
QUIZ	Q10	TTF	12	14	COLBY

Soc. Sci. 116. Family Living. Credit 4 hours. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. Prerequisite: Sophomore standing or consent of instructor.

F1	TT	1	96	E LIPMAN
	WF	1	37	

SOCIOLOGY

Sociol. 100. Introduction to Sociology. Credit 3 hours. Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. Prerequisite: Sophomore standing.

A1	MWF	8	38	CORLEY
D1	MWF	11	80	KLASSEN
F1	MWF	1	16	CORLEY
G1	MWF	2	28	KLASSEN
H1	MW	3	37	KLASSEN
	F	3	14	

Sociol. 140. Social Control. Credit 3 hours. The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

C1	M	10	37	CORLEY
	WF	10	16	

Sociol. 276. Sociology of the City. Credit 3 hours. Study of urban structure and ecology, particularly in light of the planning movement and the urban populations; growth and development of urban communities. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152; junior standing.

E1	MWF	12	76	CORLEY
E2	MW	12	14	KLASSEN
	F	12	96	

Spanish 101. Elementary Spanish. Credit 4 hours. For students who have no credit in Spanish. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

C1	TWTF	10	228	MARSH
H1	TWTF	3	233	OLSEN
J1	TWTF	4	233	

Spanish 102. Elementary Spanish. Credit 4 hours. Continuation of Spanish 101. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

A1	TWTF	8	228	MARSH
D1	TWTF	11	230	OLSEN
E1	TWTF	12	228	MARSH
F1	TWTF	1	232	OLSEN
J1	TWTF	4	228	TORT

Spanish 103. Intermediate Spanish. Credit 4 hours. Rapid reading, review of grammar, composition, conversation. Prerequisite: Spanish 102 or two years of high school Spanish.

* Admission to this section upon consent of instructor only.

B1	TWTF	9	233	SANCHEZ
C1	TWTF	10	233	SANCHEZ
F1	TWTF	1	228	TORT

Spanish 104. Intermediate Spanish. Credit 4 hours. Continuation of Spanish 103. Prerequisite: Spanish 103 or three years of high school Spanish.

B1	TWTF	9	228	MARSH
D1	TWTF	11	228	TORT
E1	TWTF	12	233	OLSEN
H1	TWTF	3	228	TORT

Spanish 114. Elementary Composition and Conversation. Credit 2 hours. May be taken concurrently with Spanish 104. Does not count toward the major in Spanish. Prerequisite: Spanish 113 or equivalent.

R1	TT	1	233	SANCHEZ

Spanish 202. Introduction to Spanish American Literature. Credit 3 hours. Reading of representative authors of Spanish America. Prerequisite: Spanish 104 or four years of high school Spanish.

P10	TTF	11	233	SANCHEZ

Group Remedial Speech. **No credit.** Students with articulatory problems, particularly those with foreign dialects, may register for this course at the Student Counseling Service, Room 303, in advance of the dates specified. Prerequisite: Consent of the instructor.

D1	MW	11	300	

Speech 101. Principles of Effective Speaking. **Credit 3 hours.** Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. Credit 3 hours. Students with 95 or more credit hours receive only 2 hours credit.

B1	MWF	9	116	HOVDE
C1	MWF	10	116	HOVDE
F1	MWF	1	116	HOVDE
G1	MWF	2	116	PITT
G2	MWF	2	226	CREWS
G3	MWF	2	224	HOSKINS
H1	MWF	3	224	KUNDRAT
H2	MWF	3	226	CREWS
J1	MWF	4	226	CREWS
L1	MTT	8	224	ARMOLD
M10	TTF	9	226	KUNDRAT
N1	MTT	10	226	KUNDRAT
N10	TT	10	224	GOULSON
	F	10	226	
P1	M	11	226	ARMOLD
	TT	11	224	
P10	TTF	11	226	KUNDRAT
Q1	MTT	12	116	PITT
Q10	TTF	12	226	GOULSON
R1	M	1	226	THOMPSON
	TT	1	224	
T1	MTT	3	116	PITT

Speech 105. Voice and Articulation. Credit 2 hours. A drill course for the improvement of the normal speaking voice. Credit 2 hours. Students with 95 or more credit hours receive only 1 hour credit.

C1	MWF	10	224	HOSKINS
F1	MWF	1	224	KUNDRAT

Speech 107. Parliamentary Procedure. Credit 2 hours. Principles and practice of parliamentary procedure. Students with 95 or more credit hours receive only 1 hour credit.

Q1	TT	12	224	THOMPSON

Speech 111. Business and Professional Speaking. Credit 2 hours. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. Credit 2 hours. Prerequisite: Speech 101; sophomore standing.

R1	TT	1	116	PITT

Speech 113. Group Discussion and Conference Leadership. Credit 3 hours. Study of leadership, group process, and interpersonal relations in the small group, conference, and the public forum, with emphasis on practice in leading and participating in various types of public discussion and conference, with materials drawn from current public questions. Prerequisite: Sophomore standing.

D1	MWF	11	116	HOVDE

Speech 141. Oral Interpretation of Literature. Credit 3 hours. Principles of interpretation, analysis, and oral reading of prose literature, dramatic literature, and verse. Students with 95 or more credit hours receive only 2 hours credit.

E1	MW	12	226	CREWS
	F	12	116	
M1	MTT	9	224	ARMOLD

Speech 161. Fundamentals of Acting. Credit 3 hours. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. Prerequisite: Credit or concurrent registration in Speech 141.

R10	TTF	1	226	GOULSON

SPEECH FOR FOREIGN STUDENTS

(See also Rhetoric for Foreign Students.)

Speech 103. Speech for Foreign Students. No credit. A study of the sounds and intonation patterns of American English and the relation of sound to spelling, including drill sessions designed to improve the student's ability to speak and understand English at normal conversational speed. Prerequisite: Reading knowledge of English and ability to understand instructions.

D1	MWF	11	224	HOSKINS
	TH	3/5	224	

Speech 104. Speech for Foreign Students. No credit. Pronunciation of English for students whose native language is not English. A study of the sounds and intonation patterns of American English, designed to improve the student's ability to speak at a normal conversational speed. Course deals with material in pronunciation similar to Speech 103 but is designed for more advanced students. Prerequisite: Speech 103 or consent of the instructor.

E1	MWF	12	224	HOSKINS

T. A. M. 150. Analytical Mechanics (Statics). Credit 2 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic states, forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. Prerequisite: Registration in Mathematics 143; Physics 106.

Q1	TT	12	110

T. A. M. 151. Analytical Mechanics (Statics). Credit 3 hours. Resultants of force systems, algebraic and graphical condition of equilibrium for force systems, graphic statics, moment diagrams, virtual work, forces due to friction centroid. Prerequisite: Registration in Mathematics 143; Physics 106.

C1	MWF	10	110
R1	M	1	110
	TT	1	144

T. A. M. 154. Analytical Mechanics (Statics and Dynamics). Credit 4 hours. A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. Prerequisite: Registration in Mathematics 143; Physics 106.

B1	MWTF	9	110
F1	MTTF	1	110
J1	MTWF	4	113

T. A. M. 156. Analytical Mechanics (Statics and Dynamics). Credit 5 hours. A combination of Theoretical and Applied Mechanics 150 and 211. Prerequisite: Registration in Mathematics 143; Physics 106.

E1	MTWTF	12	144

T. A. M. 171. Elements of Mechanics (Statics). Credit 3 hours. Resultants and equilibrium of force systems; conditions of equilibrium appiled to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. Prerequisite: Mathematics 123.

G1	MWF	2	110

T. A. M. 172. Strength of Materials. Credit 3 hours. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. Prerequisite: Theoretical and Applied Mechanics 171.

G1	MWF	2	113

T. A. M. 211. Analytical Mechanics (Dynamics). Credit 3 hours. Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation, rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, impulse and momentum. Prerequisite: Theoretical and Applied Mechanics 150 or 151.

A1	MWF	8	110
J1	MWF	4	110

T. A. M. 221. Elementary Mechanics of Deformable Bodies. Credit 3 hours. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. Prerequisite: Theoretical and Applied Mechanics 150, 151, 154 or 156.

C1	MWF	10	144
H1	MWF	3	110

T. A. M. 223. Mechanical Behavior of Solids. Credit 1 hour. Tests of steel, cast iron, aluminum alloys, concrete and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance; engineering significance of mechanical properties. Prerequisite: Credit or registration in Theoretical and Applied Mechanics 221.

A	TH	11/1	61
B	F	10/12	61
C	W	9/11	61
D	M	9/11	61

T. A. M. 224 Behavior of Materials. Credit 3 hours. Introduction to atomic and molecular structure of metals, cement, concrete, plastics, ceramics, and glass; response of these materials to rapid, steady, and repeated loads at various temperatures (and environments) in terms of rheological models; fracture behavior of specific materials, i.e., stress rupture, brittle fracture, and fatigue of metals and concrete. Prerequisite: Theoretical and Applied Mechanics 221.

D1	MWF	11	110

STUDENT COUNSELING SERVICE

READING AND STUDY SKILLS IMPROVEMENT

READING IMPROVEMENT. NO CREDIT.
For students who wish to increase their rate of reading or to improve their vocabulary and comprehension skills.

R1	MW	10	300	Staff
R2	MW	11	300	Staff
R3	MW	1	300	Staff
R4	TT	10	300	Staff
R5	TT	11	300	Staff

STUDY SKILLS IMPROVEMENT. NO CREDIT.
For students who need to develop more effective methods of study. Provides practice in studying reference materials efficiently, improving concentration, taking meaningful notes, and preparing for examinations.

S1	MW	10	300	Staff
S2	MW	1	300	Staff
S3	MW	2	300	Staff
S4	TT	10	300	Staff
S5	TT	11	300	Staff
S6	TT	1	300	Staff

VOCABULARY DEVELOPMENT. NO CREDIT.
For students who wish to acquire the language habits of an educated person. Discussion on the use of vocabulary in thinking and communication. Practical exercises in vocabulary building.

V1	MW	11	300	Staff

NOTETAKING AND OUTLINING. NO CREDIT.
Offers students specific aids to evaluate lecture materials and to organize themes, reports, and essay examinations.

N1	WF	2	300	Staff

CAREER PLANNING. NO CREDIT.
For students who want to clarify their vocational goals, as a basis for choosing a major. Focuses on self-evaluation of abilities, interests, and personal needs as bearing on occupational choice.

C1	M	2	300	Staff
C2	Tu	1	300	Staff

BOUND BY HNM

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